RECORDS CODE SHEET
SND 4535 (Rev. 1-62)

NAVAL AVIATION SAFETY CENTER

GENERAL (Card No. 1)

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Major Command	2	27
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Aircraft Injury	L	29
Maneuver prior to Accident	N	30
First Accident type	B 3	31-32
First Accident phase	3 6 4	33-35
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Pilot Factor, Second	X Y	50-51
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Special Data & Cond.	C H M D	62-68
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Kind of Flight	3 A 4	22-24
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ACCIDENT DAMAGE: A (9)

ACCIDENT INJURY: L (10)

FISCAL YEAR: 3 (75)

	Don't Count		Enemy Action		Other Aircraft		
I.D. NO.	2 1	ø 1	8	1	ø 4		
	YR	MO	DAY	TYP	SEQ		
Model	H	S	S	2			
	11	12	13	14	15		

SPECIAL ATTN: ("X")

Model Code: 8 2 (76, 77)

IBM: The above Fields are to be punched in all Coded Code

PERSONNEL STATISTICS (Card No. 3)

File Number → [redacted]

Name 16 17 18 19 20 21

03 H U G H E S J R	3	1	E	A	A	2	L	1	1	2 2	D	2 7	1 9	2 6	ø 9	B	1 3	3 2	6 5
22 23 24 25 26 27 28 29 30 31	32	35	37	40	42	45	47	48	51	52-53	55	56-57	58-59	62-63	65-66	68	69-70	71-72	73-74
04 [redacted]	5	2	6	3	C	1	C	1	4	ø ø	2	1 ø	ø 5	ø 9	ø 5	A	ø 5	ø 1	8 2

Name 16 17 18 19 20 21

File Number → [redacted]

IBM: PERSONNEL CODED ON REVERSE SIDE ☒ HPB

CODED clw REVIEWED HPB LOGGED 20 PUNCHED 2C VERIFIED ____ REVIEWED HPB REPUNCHED ____

CODE SHEET REVIEWED BY CLASS DESK ANALYST H. (Initials) ____ (Date)

18 Y 1-63

OTHER INJURED PERSONNEL

(Modified Card No. 3)

C.C. 79 - 80	FILE NUMBER (16–21)	NAME (22–31)	Rank or Rate (32–34)	BR Service (35–36)	Age (37–39)	Yrs. Espatr. (40–41)	Status (42–44)	Position (45–46)	Inj. to Ind. (47–48)	Abandon A/C (49)
05	(b) (6)	BLYTHE F	AE	1	—		I	3	L	1
06										
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IBM: Place an "X" overpunch in CC80 if these cards are coded.

A & R DEPARTMENT NARRATIVE CODE SHEET

YEAR 1	MTH 2	3	DAY 4	5	TYPE 6	NO. 7	8	DAM 9	INJ 10	MODEL 11	12	13	14	15
A	1	9	1	8	1	0	4	4	L	4	5	5	2	

BUREAU NUMBER 149064 [redacted] 20 MAR 1963 [redacted]

75	76	77	78
3	8	3	6

[redacted]

16–70: M/CG A/C ENT R/SQUAK ON L/OFF FLEW INTO WTR RT DFS TURN

PREPARED BY [redacted] R&S LOG CLERK [redacted] PUNCHED [redacted] OCT 23 1962 VERIFIED [redacted]

NARRATIVE BRIEF

VFR T/O A/C ENTERED INSTRUMENT CONDITIONS UP WIND TURN. PILOT FAIL MAINTAIN COMPLETE INSTRUMENT FLT DURING IFR CONDITIONS. ACFT FLEW INTO WATER IN DECENDING RT TURN. SUSPECT PILOT DISORIENTED. PF - WX.

PREPARED BY [redacted] [redacted] PUNCHED [redacted] NOV 30 1962 VERIFIED [redacted]

U. S. NAVAL AVIATION SAFETY CENTER
U. S. NAVAL AIR STATION
NORFOLK 11, VIRGINIA

NASC:13:ees
Ser: 775
20 March 1963

SPECIAL HANDLING REQUIRED IAW OPNAVINST P3750.6 SERIES

From: Commander, U. S. Naval Aviation Safety Center
To: Commanding Officer, Helicopter Anti-Submarine Squadron NINE

Subj: HS-9 AAR ser 1-62 concerning SH-3A (HSS-2) BuNo 149004 accident occurring 18 October 1962, pilot HUGHES

1. The subject report and all endorsements thereon have been reviewed. The Naval Aviation Safety Center concurs with the comments and recommendations of the Aircraft Accident Board as modified by subsequent endorsers subject to the following.

2. There is little question that the all weather helicopter Anti-Submarine Warfare (ASW) mission leaves small margin for error by the pilot flying the mission during the hours of darkness. During a recent eight month period six Navy pilots flew their helicopters into the water at night. Only one of these was not engaged in ASW training. Every effort must be made by carrier personnel to provide Helicopter Anti-Submarine Squadron (HS) pilots with the best possible operating conditions and facilities. Every effort must be made by HS squadron and air group supervisory personnel to provide their pilots with clear concise doctrine and adequate training in the use of that doctrine. Standardization is a must if the mission is to be flown safely. It is largely up to squadron supervisory personnel to insure standardization in sound instrument flight procedures. It is, of course, even more up to the pilots themselves to adhere to these procedures. There is ample reason to believe that, (b) (5)

(b) (5)

3. There is presently no action being taken within the Bureau of Naval Weapons to install a low level audio warning device in the SH-3A (HSS-2). Such a move, however, is being studied. The Naval Aviation Safety Center has previously recommended that such a warning device be installed and will continue to pursue the subject.

4. After thorough consideration of the minority opinions expressed in the Medical Officer's Report the Center concurs with the Board that pilot disorientation due to improper instrument flight procedures was the primary cause of the mishap.

5. The Board presented insufficient evidence to substantiate a contributing factor of supervisory on the part of the Air Operations Department.

4

NASC:13:ees

SPECIAL HANDLING REQUIRED IAW OPNAVINST P3750.6 SERIES

Subj: HS-9 AAR ser 1-62 concerning SH-3A (HSS-2) BuNo 149004 accident occurring 18 October 1962, pilot HUGHES

6. The cause of this accident has been recorded by the Center indicating the pilot as the primary factor and weather as a contributing factor.

(b) (6)
By direction

Copy to:
BUWEPS (7-12) (2)
COMNAVAIRPAC
COMFAIRQUONSET
COMCARDIV 18
CO USS ESSEX (CVS-9)
COMNAVAIRTESTCEN PAX RIVER
COMCVSG 60
BUWEPSFLTREADREPLANT
BUWEPSREP STRATFORD
CO HS-1, 2, 3, 4, 5, 6, 7, 8, 10, 11
CO VX-1
CO HMX-1
NFSLO DIO/S NORTON AFB
COMNAVAIRLANT

5

CNAL 308
Ser: 12497
6 DEC 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

FIFTH ENDORSEMENT on HS-9 AAR ser 1-62, SH-3A, 149004, accident occurring 18 October 1962, pilot HUGHES

From: Commander Naval Air Force, U.S. Atlantic Fleet
To: Commander, U.S. Naval Aviation Safety Center

Subj: Aircraft Accident Report

1. Forwarded, concurring in the comments and recommendations of the Aircraft Accident Board as modified by subsequent endorsers, subject to the following comment:

a. The recommendation contained in paragraph 2a(1) of the second endorsement is fully concurred in. We can no longer afford to fly the newer all weather helicopters, under instrument conditions, in the same offhanded manner which has often prevailed in the past. Tolerances in instrument flying are fine but errors will occur and unless a certain margin of safety is allowed, accidents of the nature reported herein will continue to plague us.

(b) (6)

By direction

Copy to:
BUWEPS (F-12)
COMNAVAIRPAC
COMFAIRQUONSET
COMCARDIV-18
CO, USS ESSEX (CVS-9)
COMNAVAIRTESTCEN PATUXENT RIVER
COMCVSG-60
BUWEPSFLTREADREPLANT
BUWEPSREP STRATFORD
CO, HS-1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
CO, VX-1
CO, HMX-1
NAVY FLIGHT SAFETY LIAISON OFFICER, DIRECTORATE OF FLIGHT SAFETY RESEARCH, NORTON AFB, SAN BERNARDINO, CALIF.

6

ORIGINAL

FB2-18/303/mn
3750.
Ser 394
26 November 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 70, OPNAVINST 3750.6D

FOURTH ENDORSEMENT on HS-9 AAR 1-62 concerning SH-3A (HSS-2) BUNO 149004 occurring 18 October 1962, pilot HUGHES

From: Commander Carrier Division EIGHTEEN
To: Commander U. S. Naval Aviation Safety Center
Via: Commander Naval Air Force, U. S. Atlantic Fleet

Subj: Aircraft accident; report of

1. Forwarded.

2. Commander Carrier Division EIGHTEEN concurs with the majority of the Accident Board and the first and second endorsees that the most probable cause of the accident was pilot disorientation.

3. Paragraph 2a of the second endorsement is not concurred with. Present operating procedures for the HSS-2 aircraft are considered satisfactory.

4. While the flight deck red floodlighting system is not considered involved in this aircraft accident, observations of the system will continue to be made by ESSEX and CVSG 60 during night flight operations and recommendations as to its employment will be made by separate correspondence.

C. E. Stevenson

Copy to:
NAVAVNSAFCEN
BUWEPS
COMNAVAIRLANT
COMNAVAIRPAC
COMFAIRQUONSET
BUWEPSREP STRATFORD
NFSLO DIR FLIGHT SAFETY NORTON AFB CALIF
NATC PAX RIVER
BUWEPS FLTHEADREPLANT
COM CVSG 60
CO HS 1,2,3,4,5,6,7,8,9,10,11
CO VX-1
CO HMX-1

ORIGINAL

7

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 70, OPNAVINST 3750.6D

CV39/WEK:as
Code 43
Ser
15 NOV 1962

THIRD ENDORSEMENT on HS-9 AAR 1-62 concerning SH-3A (HSS-2) BUNO 149004 occurring 18 October 1962, pilot HUGHES

From: Commanding Officer, USS ESSEX (CVS-9)
To: Commander, U. S. Naval Aviation Safety Center
Via: (1) Commander Carrier Division EIGHTEEN
(2) Commander Naval Air Force, U. S. Atlantic Fleet

Subj: Aircraft accident; report of

1. Forwarded, concurring with the recommendations of the Board and subsequent endorsements thereto subject to the following comments:

a. Recommendation 1: Concur as modified by the 1st and 2nd endorsements.

b. Recommendation 3: Concur with the 2nd endorsement. It is mandatory that all personnel concerned with flight operations keep the controlling agencies advised of any significant changes to the weather that would effect operations as planned.

c. Recommendation 9: While the desirability of being able to recover wreckage to assist in accident analysis is recognized the feasibility of making individual sections of an aircraft bouyant is certainly open to question.

2. The present red flight deck flood lighting was installed just prior to this deployment. It is under evaluation by the ship and air group. The study recommended in paragraph 2b of the second endorsement is highly desirable.

G. S. BOGART

Copy to:
NAVAVNSAFCEN
BUAERPG
COMNAVAIRLANT
COMNAVAIRPAC
COMCARDIV EIGHTEEN
COMFAIRQUONSET
BUWEPSREP STRATFORD
NFSLO DIR FLIGHT SAFETY NORTON AFB CALIF
NATC PAX RIVER
BUAEPSFLTREADREPLANT
COM CVSG-60
CO HS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
CO VX-1
CO HMX-1

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SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARAGRAPH 70, OPNAVINST 3750.6D

F12/CVSG-60/00
3750
ser 364
9 November 1962

SECOND ENDORSEMENT on HS-9 AAR 1-62 concerning SH-3A(HSS-2) BUNO 149004, accident occurring 18 October 1962, pilot HUGHES

From: Commander Carrier Anti-Submarine Air Group SIXTY,
Fleet Post Office, New York, New York
To: Commander Naval Aviation Safety Center
Via: (1) Commanding Officer, USS ESSEX (CVS-9)
(2) Commander Carrier Division EIGHTEEN
(3) Commander Naval Air Force, U.S. Atlantic Fleet

Subj: Aircraft Accident; report of

1. Forwarded, concurring with the recommendations of the Accident Board and the first endorsement thereto with the following comments and exceptions:

a. Concur with the majority of the accident board in that the most probable cause of the accident was pilot disorientation or vertigo.

b. Comment concerning recommendation 1: Concur with the recommendation as stated. At the time of the accident a definite horizon was discernable through three quarters of the surrounding area. While conditions may not have been ideal, they were within acceptable limits for the type of operation in progress. The aircraft and crew were fully qualified to operate under these conditions.

A discrepancy exists between the visibility stated in section c of the report and the two statements of the official weather observer and aerological officer, enclosures 23 and 24, respectively. It is felt that enclosures 23, 24, and the first endorsement contain the more accurate information on weather in the vicinity of the ship at the time of the accident. Contrary to the boards conclusion in section d., it is felt weather must be considered a contributing factor in this case.

c. Concur with recommendation 3, but it should be pointed out that CIC is not the base source of information on weather in the control zone. The most reliable information is obtained from Pri Fly and the bridge supplemented when possible by pilot reports, lookout reports, CIC information and when deemed necessary by special observations of qualified aerological personnel. Weather observation at sea during hours of darkness may frequently be in error.

2. In considering the point of pilot disorientation or vertigo there are two pertinent factors not reported by the board which are presented below for consideration and possible action:

a. Helicopter night deck launch procedures: Helicopter flight altitudes at sea have been largely determined by, (1) the gate altitude for commencing an automatic transition to a hover (150 feet, 60 knots); and, (2) Night datum tactics which restrict VS aircraft to 300 feet, thereby leaving the altitude below 200 feet available for the exclusive use of helicopters. In view of these two facts it has been customary for helicopters to remain at low altitudes at all times. From personal observation it may be stated that following take off from a carrier deck, day or night, a turn is ordinarily commenced soon after

ORIGINAL

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FF12/CV30-60/00
3750

leaving the deck, usually at an altitude of 150-200 feet. This procedure presented no particular problem with the HSS-1N since its cruising speed was normally 60-70 knots and pilot reaction time was sufficient. However, with the advent of the HSS-2 and an increase in speed to 90-120 knots it may be readily seen that for any given nose down change in pitch the rate of descent will be increased in direct proportion to the increase in speed. Pilot reaction time is materially reduced. It is recommended that:

(1) A night/IFR standard procedure be established for the HSS-2 to require climbing straight ahead after take off to a minimum altitude of 300 feet prior to commencing a turn. This procedure will permit the pilot to become comfortably established on instruments and allow the aircraft to stabilize in air speed.

(2) The minimum altitude for proceeding at speeds above 80 knots IAS shall be 300 feet, except when actually engaged in dipping operations.

These recommendations will be forwarded by separate correspondence as a recommended addition to the NATOPS Manual. In the interim such procedures will be implemented within this air group by local directive.

b. "Red Carpet Deck Lighting". Red deck flood lighting has been a boon to plane handlers and maintenance personnel. In addition most pilots mildly praise the system and state generally that it assists, or at least does not hinder, flight operations and is particularly desirable during recovery. However, the one area where red lighting may be detrimental to safety is during launch. This would be particularly true if the red light as presently employed impairs night vision. It is recommended that:

(1) A study be made to determine the extent, if any, to which "Red Carpet" lighting may disrupt night vision or create a false horizon thereby actually inducing vertigo.

(2) As a result of the study recommended in 2.b.(1) above, guidelines for use of such lighting be published to all fleet carriers.

R. L. Severns

R. L. SEVERNS

Copy to:
NAVAVNSAFCEN
BUWEPS
COMNAVAIRLANT
COMNAVAIRPAC
COMFAIRQUONSET
BUWEPSREP STRATFORD
NPSIO DIR FLT SAF NORTON AFB CALIF
NATC PAX RIVER
BUWEPSFLTREADREPLANT
CO HS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
CO VX-1
CO HMX-1

ORIGINAL

10

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

OO:HG:bb
Ser: 549

NOV 6 1962

FIRST ENDORSEMENT ON HS-9 AAR 1-62 concerning SH-3A (HSS-2) BUNO 149004, occurring 18 October 1962

From: Commanding Officer, Helicopter Anti-Submarine Squadron NINE
c/o Fleet Post Office, New York, New York
To: Commander, U. S. Naval Aviation Safety Center
Via: (1) Commander Carrier Anti-Submarine Air Group SIXTY
(2) Commanding Officer, USS ESSEX (CVS-9)
(3) Commander Carrier Division EIGHTEEN
(4) Commander Naval Air Force, U. S. Atlantic Fleet

Subj: Aircraft accident; report of

1. The comments and recommendations of the Accident Board made with regard to HS-9 AAR 1-62 of 18 October 1962 are forwarded and concurred in with the following comments and exceptions:

a. Recommendation 1: Concur. CNAL Instruction 3740.12D states that carrier qualifications will be conducted in VFR weather with the further connotation that this will not be marginal VFR but weather ensuring a good horison.

The weather this particular night had been considerably worse until one hour prior to this launch. From personal observation while flying on the previous flight I can say that after approximately 2300 the weather improved and that except for isolated squalls there was a definite horizon in all quadrants.

b. Recommendation 2: Concur. However, the Operations Officer of the USS ESSEX personally talked with LCDR HUGHES in the Ready Room and asked him if he wished to cancel this flight stating that if he wished to do so, he would recommend it to the Flag. LCDR HUGHES wished to try and finish qualifying three remaining HAPC's who needed some night carrier qualification landings. The agreement then was that if this progressed rapidly some of the co-pilots might be qualified, however, this would be secondary only and there would be no hesitation to cancel for the remainder of the night.

Here it would be well to consider some background of the previous operations. Helicopter carquals had been worked in on a "time and space available" basis. Only one hour period had been specifically scheduled and flown for helicopter carquals. This was accomplished commencing approximately twenty minutes after leaving port at Norfolk. The other day and night landings had been accomplished after flying from 3 to 4 hours on missions varying from ASW and Plane Guard to merely "grinding" around in a delta pattern, waiting for a clear deck or a delay in fixed wing quals in order to "work in" some helo carquals. The fact that by this method the squadron had qualified all pilots during the day and had only three HAPC's and the co-pilots to finish night qualifying was a matter of pride with LCDR HUGHES who was Flight Officer as well as the Squadrons's NATOPS instructor. (b) (5)

(b) (5) (b) (5)

He did however say that he felt fine and did appear so. All indications are that fatigue or apprehension played no role in this accident.

c. Recommendation 3. I was personally in Primary Fly and heard the Captain himself advise the Air Officer to hold "52" on deck and land "61", holding both until we were through a rain shower ahead. The Captain was informed that "61" had been told to go ahead of the ship to check the weather and he then reached for the microphone to tell "52" to stay on deck. Unfortunately "52" had just lifted and the Air Officer correctly refrained from talking as he was transitioning to flight, however, immediately afterwards he called both aircraft to return and land. It should certainly be standard doctrine that CIC keep all concerned abreast of the weather. It should also be standard doctrine that aircraft not be launched into a rain squall. Primary Fly does have difficulty observing weather directly ahead and should be kept completely current on the status of weather at all times.

d. Recommendation 4. Concur. Design studies should also be conducted to determine feasibility of relocating some of the heavy electronic equipment immediatley in back of the Sonar Operator's seat.

e. Recommendation 5. Concur.

f. Recommendation 6. Concur.

g. Recommendation 7. Concur.

h. Recommeddation 8. Concur.

i. Recommendation 9. Concur if structurally feasible.

j. Recommendation 10. Concur with the following comments: Storage of necessary survival equipment, pyrotechnics, etc. has been brought up for consideration and action numerous times by not only this squadron but others operating HSS-2 aircraft. It would seem absurd that with all the excess space available in the HSS-2 in its configuration as an ASW vehicle, adequate facilities could not be built in. As yet no approval as to methods of attachment or authorized installations have been forthcoming.

k. Recommendation 11. Concur. This has been done and will continue to be promulgated both by education and flight training.

l. Recommendation 12. Concur. In addition improvement should be instigated in regard to the inside cockpit lights and dials. Reflections from various information and warning lights (i.e.,,the navigation panel lights) create weird effects on the huge plexiglas windows at night under IFR conditions.

m. Recommendation 13. Concur. There are numerous requirements generated whereby the pilot or co-pilot must rotate his head at least 90° or more from the normal field of gravity. All the switches and dials on the Doppler-Coupler, Navigation, and Radio Console require at least this much movement of the head for close scrutiny.

n. Recommendation 14. Heartily concur, and a letter is in the process of being prepared and sent via channels to so commend the USS MANLEY.

2. With regard to the minority report and the always present conjecture as to what actually caused the accident, the following as a summary are considered appropriate as (1) Possible causes or contributing factors, (2) Important regardless of their impact on this accident

a. The ironic few seconds delay in acting to hold "52" on deck.

b. The ensueing transmission for both to return to ship. (b) (5)

(b) (5)

c. The movements of the destroyers could very logically have disoriented him, as while he was making his first three landings his downwind leg carried him over one. While he was switching pilots it moved over to the right (b)

(b) (5)

He obviously was concerned with meeting the other aircraft who had just turned downwind. (b) (5)

(b) (5)

(b) (5)

(b) (5)

After a comparatively recent training flight he personally appraised me that the pilot he was checking was not ready for NA2P as he had tried to fly him into the water twice. These were under much more difficult circumstances and worse weather than the night in question. LCDR HUGHES was one of the most qualified and experienced pilots in the squadron, especially with regard to instrument flying. He had no record of any previous accidents. (b) (5)

(b) (5)

e. A control malfunction of such a degree that it was undetable to either pilot or co-pilot cannot be ruled out, however, all indications, statements, and investigation make this highly improbable.

f. Pilot disorientation must be included as a factor since even had any of the aforementioned occurred the fact remains that his radio transmission, the copilot's statement and his observed track do conclusively indicate that disorrientation, to what degree and for what reason unknown, did exist.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

3. The NATOPS deviation of placing the qualifying pilot in the left seat was deliberately done on the insistance of the Flight and Operations Officer with my complete concurrance for the following reasons:

a. There are no brake pedals on the left side making pilot switches hazardous on deck.

b. Visibility from the left side in a left hand "standard" carrier approach is much better.

c. A decision had been made to allow the HAPC who had previously qualified to remain in the aircraft rather than make "double switches" to preclude pilots "manning the aircraft" with less than perfect night adaptation

d. To ensure that the most qualified person was in the best position to assume control in any emergency or unusual flight condition, especially since there existed the possibility of progressing to co-pilot quals after these HAPC's were qualified.

H. GLENZER, JR.

AIRCRAFT ACCIDENT REPORT
OPNAV FORM 3750-1 (Rev 12-59) PAGE 1

SPECIAL HANDLING REQUIRED *in accordance with Para* 70 *OPNAV INSTRUCTION 3750.6*D

OPNAV REPORT 3750-1

PART I - GENERAL

SECTION A - IDENTIFICATION

1. A/C ACCIDENT BOARD APPOINTED BY: Commanding Officer, HELASRON NINE	2. DATE OF ACCIDENT: 18 OCT 1962 — TIME (LCT): 2359R — 3. SERIAL NUMBER: 1-62
4. TO: Commander, Naval Aviation Safety Center	5. ENCLOSURES (1) Copilots Statement
6. VIA (1) CO, HELASRON NINE	(2) Copilot's statement (BUNO 149004)
(2) COMCVSG-60	(3) Pilot's statement (BUNO 149681)
(3) CO, USS ESSEX (CVS-9)	(4) Copilot's Statement (BUNO 149681)
(4) COMCARDIV 18	(5) Statement of FDO
(5) COMNAVAIRLANT	(6) Witness' Statemtnt, LT [redacted]
	(7) Witness' Statemtnt, LT [redacted]
	(8) Witness' Statement, LCDR [redacted]
	(9) Statement of Air Officer
7. REPORTING CUSTODIAN (if different than item 1, above)	8. ACTIVITY OPERATING A/C (if different than item 7.)

9. KIND OF FLIGHT	10. TIME OF DAY	11. LOCATION OF ACCIDENT	12. ELEVATION ABOVE SEA LEVEL
3A4	☐ DAWN ☐ DAY ☐ DUSK ☒ NIGHT	070 Rel. 2300 yds fm ESSEX 18-34N 75-22W	Sea Level

13. PLACE OF LAST TAKE-OFF	14. CLEARED
USS ESSEX (CVS-9)	FROM USS ESSEX TO USS ESSEX

15. TYPE CLEARANCE: ☐ IFR ☒ VFR ☐ DVFR ☒ LOCAL ☐ OPERATIONAL ☐ AIRWAYS ☐ DIRECT ☐ OTHER (Specify)

16. TIME IN FLIGHT	17. TYPE ACCIDENT	18. PHASE OF FLIGHT
.1	Uncontrolled Collision with water	Upwind turn in approach pattern

A/C

19. MODEL	20. SERIAL NO.	21. DAMAGE TO A/C	22. DOLLAR COST	23. AIRSPEED (Kts.)	24. A/C WEIGHT
SH-3A (HSS-2)	149004	☒ A ☐ B ☐ C ☐ D ☐ E ☐ F	1,484,000	120 knots	16,230 lbs

25. LIST MODEL, SER NR, REPORTING CUSTODIAN AND DAMAGE CLASSIFICATION OF ANY OTHER A/C INVOLVED (Complete an OPNAV FORM 3750-1 for each A/C involved)

SECTION B - PERSONNEL DATA

1. NAME (Last, first and middle initials)	2. RANK RATE	FILE SER NO	DESIGNATOR	BRANCH OF SERVICE	3. AGE	4. YRS OF EXP CMA	5. BILLET	6. POSITION	7. INJURY CODE
PILOT (at controls at time of accident): HUGHES, J. R.	LCDR	[redacted]	1310	USN	33	11	HAPC	R seat Instruc	A
CO-PILOT: [redacted]	LTJG		1315	USNR	25	2.6	HAPC	L seat Night Qual	C

PERSONNEL		8. OFT - OPERATIONAL FLIGHT TRAINER AVAILABLE	8. OFT USED	9. CPT - COCKPIT PROC. TRAINER AVAILABLE	9. CPT USED	10. UNIT TO WHICH PERSONNEL ARE ATTACHED	11. TYPE INSTRUMENT CARD
PILOT	YES	X	X			HELASRON NINE	☒ STANDARD ☐ SPECIAL
	NO			X			
CO-PILOT	YES					HELASRON NINE	☒ STANDARD ☐ SPECIAL
	NO	X		X			

12. PILOT EXPERIENCE IN HOURS

ITEM		PILOT	CO-PILOT
ALL MODELS		2708.9	1055.9
ALL MODELS IN LAST 12 MONTHS		275.5	206.0
ALL MODELS IN LAST 3 MONTHS		98.4	58.9
ALL SERIES THIS MODEL (item 19)	A/C	269.5	98.3
	OFT / CPT	22.0	
ALL SERIES THIS MODEL LAST 12 MONTHS	A/C	267.9	98.3
	OFT / CPT	22.0	
ALL SERIES THIS MODEL LAST 3 MONTHS	A/C	98.4	58.9
	OFT / CPT	0.0	

ITEM		PILOT	CO-PILOT
CV LANDINGS DAY/NIGHT		238 / *12	155 / 20
FCLP LANDINGS DAY/NIGHT		-----	-----
INSTRUMENT HOURS LAST 3 MONTHS		12.5	4.6
NIGHT HOURS LAST 3 MONTHS		31.7	1.2
TOTAL HELO. HRS. (Helo A/C Only)		656.6	822.2
TOTAL JET HOURS (Jet A/C Only)			
LAST FLIGHT, ALL SERIES THIS MODEL	DATE	18OCT62	18OCT62
	DURATION	0.6	0.1

13. OTHER PERS.

NAME (Last, first and middle initials)	DNA	RANK RATE	FILE/SERVICE NO.	ORG. TO WHICH ATTACHED	INJURY CODE	BILLET	POSITION
1. BLYTHE, George A.		ATN3	[redacted]	HELASRON NINE	A / L	Crew	R.Seat
2.							
3.							
4.							
5.							

* Old log book not avialiable - 177 CV landings brought forward to new book
Unable to determine night or day.

SPECIAL HANDLING REQUIRED IN ACCODRANCE WITH PARA 70, OPNAV INST 3750.6D

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PAGE 2

C. WEATHER

1. CEILING	2. VISIBILITY	3. RELATIVE WIND (SEE INST 5)	4. TEMPERATURE	5. DEW POINT	6. ALTIMETER SETTING
1000ft.	1.5 mi.	240 DEG / 27 KTS	77	73	29.89

7. OTHER WEATHER CONDITIONS (winds aloft, icing levels, sea state, etc. if pertinent to accident)

DEW PT 73, Density Alt. +1600, Sea Temp 86, Sea State unknown due to darkness

D. CONTRIBUTING FACTORS

✓	FACTOR	✓	FACTOR	✓	FACTOR
X	PILOT		LANDING SIGNAL OFFICER	X	MATERIAL FAILURE OR MALFUNCTION
X	CREW		OTHER PERSONNEL (Specify)		DESIGN
	SUPERVISORY PERSONNEL		ADMINISTRATIVE		ROLLING AND PITCHING DECK/ ROUGH SEAS
	MAINTENANCE PERSONNEL		AIRPORT OR CARRIER FACILITIES		UNDETERMINED
	SERVICING PERSONNEL		WEATHER		OTHER (Specify)

E. EQUIPMENT

FOR ACCIDENTS ABOARD DEPLOYED CARRIER (Complete following Session on Pilot)

1. DATE DEPLOYED	2. DAY - HOURS/LANDINGS LOGGED SINCE DEPLOYED	3. DAY - HOURS/LANDINGS LOGGED LAST 30 DAYS
8 October 1962	6.5/5	22/12
4. INSTRUMENT HRS. LOGGED SINCE DEPLOYMENT	**5. NIGHT - HOURS/LANDINGS LOGGED SINCE DEPLOYED**	**6. NIGHT - HOURS/LANDINGS LOGGED LAST 30 DAYS**
	8.2/6	15.6/6

PART II - MAINTENANCE, MATERIAL AND FACILITIES DATA

SECTION A - AIRCRAFT AND ENGINE DATA

1. AIRFRAME

DATE OF MANUFACTURE	SERVICE TOUR	MONTHS IN THIS TOUR	TOTAL NO OF OVERHAULS	FLIGHT HRS SINCE LAST OVERHAUL	FLIGHT HRS SINCE ACCEPTANCE	TYPE CHECK LAST PERFORMED	FLIGHT HOURS SINCE LAST CHECK	NO. OF DAYS SINCE LAST CHECK
31 OCT 61	1	10	0	0	246.1	2nd Cal Intermediate	35.9	23

2. ENGINE(S)

	ENGINE MODEL	ENGINE SERIAL NO.
1		
2		
3		
4		

3. GENERAL

a. DID FIRE OCCUR? ☐ BEFORE ACCIDENT ☐ AFTER ACCIDENT ☒ DID NOT OCCUR

b. DID EXPLOSION OCCUR IN FLIGHT? ☐ YES ☒ NO

c. CHECK IF APPLICABLE ☐ AMP FUR SERIAL

d. HAS DIR BEEN REQUESTED? ☐ YES ☒ NO

e. FAILED COMPONENTS INVOLVED: UNKNOWN

SECTION B - MISHAP AND CONTRIBUTING FACTORS

4. MISHAP AND CONTRIBUTING FACTORS

CHECK ITEMS PRESENT IN THIS ACCIDENT

a. ☐ A/C DESIGN
b. ☐ A/C EQUIPMENT
c. ☐ MAINTENANCE
d. ☒ UNDETERMINED
e. ☐ TECHNICAL INSTRUCTION
f. ☐ OTHER (Specify) .....
g. ☐ SURFACE FACILITIES
h. ☐ HUMAN ENGINEERING (e.g., Cockpit configurations, etc.)

5. SUMMARY

a. ALTITUDE AT MALFUNCTION	b. AIR SPEED	c. OPERATING TE HP	d. WEIGHT OF A/C	e. C.G. (% MAC)	f. KIND OF FUEL	g. FUEL PRESSURE
UNKNOWN	Kts.		16,230		JP5	

h. EVIDENCE OF FUEL CONTAMINATION: NONE

i. CAUSE OF ENGINE FAILURE OR FLAMEOUT: NONE

j. FUEL CONTROL REGULATOR/CARBURETOR (Last stuck and ser. nos., give time since new or overhauled): NONE

k. EXTERNAL STORES ABOARD A/C: NONE

(If additional space is necessary, attach additional sheets)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

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PART II — MAINTENANCE, MATERIAL AND FACILITIES DATA (Cont'd)

SECTION B — FACILITIES DATA

1. GENERAL ✓ BASIC FACILITIES INVOLVED. DESCRIBE EFFECT ON ACCIDENT IN THE ANALYSIS SECTION OF THE REPORT

	a. CLEARANCE AUTHORITY		i. WATER LANDING AREA		q. CRASH AND RESCUE
	b. FLIGHT PLANNING INFORMATION SOURCE		j. APPROACH ZONE		r. SEARCH AND RESCUE
	c. LANDING AIDS (GCA, CCA, ILS, etc.)		k. END ZONE (Over run)		s. CATAPULT
X	d. TRAFFIC CONTROL TOWER (Field or Ship)		l. SHOULDERS		t. ARRESTING GEAR (Carrier)
	e. APPROACH AND ENROUTE AIDS TO NAVIGATION		m. TAXIWAY		u. BARRIER OR BARRICADE (Field or Ship)
	f. RUNWAY WATCH		n. PARKING AREA		v. FLIGHT DECK
	g. LANDING SIGNAL OFFICER		o. EMERGENCY ARRESTING GEAR (Runway)		w. MIRROR
	h. RUNWAY		p. A/C SERVICING, HANDLING AND DIRECTING (Field or Ship)		x. OTHER (Specify)

2. SHIPS DATA

a. EQUIPMENT INVOLVED: ☐ CATAPULT ☐ ARRESTING GEAR	b. PRESSURE SETTINGS	c. WIND OVER DECK	d. RELATIVE HEADWIND	e. APPROACH SPEED (SPN-12 READING)

f. MARK NUMBER	g. MODEL NUMBER	h. LOCATION ON SHIP	i. LAUNCHING BRIDLE AND CONFIGURATION USED

j. CATAPULT / ARRESTING GEAR BULLETINS OR NOMOGRAMS USED

k. THIS PORTION SHALL BE COMPLETED WHENEVER (1) A MAJOR AIRCRAFT ACCIDENT INVOLVES ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT, OR (2) AN AIRCRAFT ACCIDENT INVOLVES MALFUNCTIONING OF ARRESTING GEAR, BARRIER AND/OR BARRICADE EQUIPMENT. MINOR ACCIDENTS OR ROUTINE DAMAGE TO CABLES, WELDINGS, AND OTHER EXPENDABLE COMPONENTS NEED NOT BE REPORTED.

ENGAGED	DECK RUNOUT (FT)	RAM TRAVEL (IN)	CONTROL VALVE SETTINGS: CONSTANT PRESSURE — DOME (P.S.I.)	CONSTANT PRESSURE — RATIO	CONSTANT RUN-OUT (WT. LBS.)	ACCUMULATOR PRESSURE (PSI)	COMMENTS (If cable failure specify number of landings and months in service)
DECK PENDANT							
DECK PENDANT							
BARRIER							
BARRIER							
BARRICADE							

PART	SECTION	ITEM	PART III REMARKS (Continue on additional sheets)	COPY DISTRIBUTION
I	A	5	ENCLOSURES (10) Statement of Staff Watch Officer (11) Statement of LCDR [redacted] (12) Statement of OOD, USS ESSEX (13) Statement of HS-9 Maintenance Officer (14) through (22) Photographs of wreckage and survival equipment (23) Weather Data (24) Statement of the Aerological Officer (25) Resume' of Pilot's flight experience	... SAFCEN DIRECT [illegible] 1cc COMNAVAIRLANT 1cc COMCARDIV 18 1cc CO USS ESSEX 1cc COMFAIRQUONSET 1cc COMCVSG-60 1cc BUWEPSREP STRATFORD 1cc NFSLO,DIR FLT SAF NORTON AFB CAL 1cc NATC PAX RIVER

COST DAMAGE TO:	GOVERNMENT PROPERTY $	PRIVATE PROPERTY	DATE SUBMITTED TO C.O.: 4 November, 1962

PART IV — SIGNATURES OF THE BOARD

SENIOR MEMBER: LCDR [redacted] ASW OFFICER	MEMBER: LT [redacted] ASO
FLIGHT SURGEON: LT [redacted] Flight Surgeon	MEMBER: LT [redacted] Quality Control

LTJG R. W. PILKENTON, Assistant Maintenance Officer

Copies to:
BUWEPSFLTREADREPLANT
HS-1,2,3,4,5,6,7,8,
10,11, VX-1, HMX-1,
COMNAVAIRPAC

PART III CONT. (ENCLOSURES)
(26) Resume' of Copilot's flight experience
(27) Copy of Flight Schedule
(28) Diagram of flight path
(29) MOR (original only)

1. NATOPS procedures or requirements were not a factor in this accident.
2. With the exception of the requirement for pilots to qualify from the right seat of the aircraft the NATOPS Manual was being complied with.
3. No requirement for change in the NATOPS Manual is indicated, however, it is believed that the requirement for pilot position during carrier qualification should be left to the discretion of individual commands.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

PART V - THE ACCIDENT

On 18 October 1962 at approximately 2356R, SH-3A(HSS-2) BUNO 149004 (helo 52) was launched from the USS ESSEX (CVS-9). This aircraft had previously been used to night carrier qualify, one pilot and a new pilot was in the left seat to commence his night carrier landings. Very shortly after launch two observers on the flight deck (see enclosures (6) and (8)) saw "2" cross the bow of the ESSEX from left to right, making a shallow turn to the right and in a shallow descent. One observer (see enclosure (6)) saw the aircraft lights disappear after contact with the water. The aircraft apparently sank immediately and the surviving co-pilot was required to exit under water (see enclosure (1)). The observer notified Primary Flight via Flight Deck Control of the incident. At about 2359 PriFly informed the Bridge that an aircraft had crashed into the water on the starboard side. Weather at this time was VFR with scattered thunderstorms (see enclosures (23) and (24)). The ESSEX maneuvered to remain clear of the immediate crash scene. CIC and the Bridge had held the helo on radar briefly then lost the return. The USS MANLEY (DD 940) and the USS BASILONE (DD 824) proceeded to the wreckage to search for survivors. At about 0018 a report was received from the MANLEY that LTJG (b) [redacted] had been rescued. The search was discontinued approximately noon on the 19th of October 1962.

PART VI - DAMAGE TO THE AIRCRAFT

The opinion of the Board derived from witness statements and recovered wreckage shown in enclosures (14-19) is that the aircraft SH-3A(HSS-2) BUNO 149004 entered the water in a right wing down attitude. The landing gear was down and dug into the water imparting a pitching moment to the aircraft. The leading edge of the starboard sponson sustained damage primarily to the fiberglas fairing. It is conjectured that the initial impact was sharp and detached the starboard sponson in such a way as to drive the trailing edge, which sustained damage, into the side of the aircraft possibly puncturing one or more fuel cells. As the aircraft bounced and tumbled approximately 120 degrees about the pitch axis, it received its second impact in an inverted, nose-down attitude as indicated on the following page. The port sponson received a direct blow to the leading edge smashing it back to the 1st thwart-ship bulkhead. The trailing edge of the port sponson was not damaged to any great extent. It is further conjectured that the aircraft broke completely open in the area forward of the engines at the top of the aircraft as illustrated. Debris shown in enclosure (14), with the exception of the sponsons, is all from this general cross-section of the aircraft. The aircraft sustained ALPHA damage and sank immediately in 900 fathoms of water.

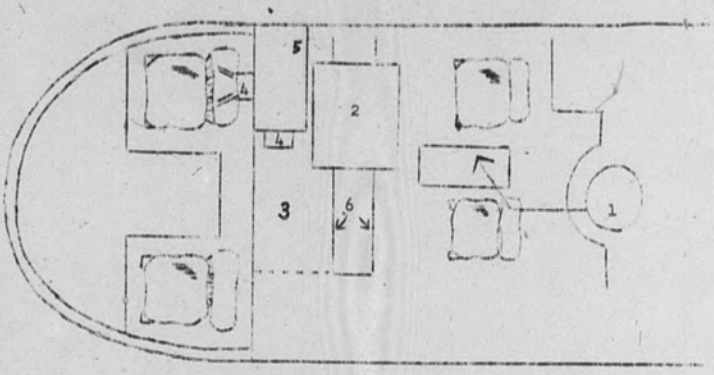
PART VII - THE INVESTIGATION

Investigation of the crash commenced immediately following the accident. Due to the sinking of the aircraft, the investigation proceeded utilizing statements from the surviving co-pilot, those witnessing the event from the other helicopter on the same launch and from personnel on the USS ESSEX (see enclosures (1)-(12)). The co-pilot was interviewed by the Squadron Safety Officer and Air Group Flight Surgeon (Board members) in the NAS Guantanamo Bay, Cuba hospital, in an attempt to establish the primary cause of the accident.

Flight crews were briefed at approximately 1900 on 18 October 1962 for a two plane night carrier qualification flight. This flight did not go as scheduled (enclosure (27)) due to extended night carrier qualifications of fixed wing aircraft. Investigation made into schedule times regarding brief, take off, and landing for a period of two days previous to the accident, revealed the following:

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 7C, OPNAV INST 3750.6D.

DIAGRAM OF SH3-A HELICOPTER



1 SONAR DOME

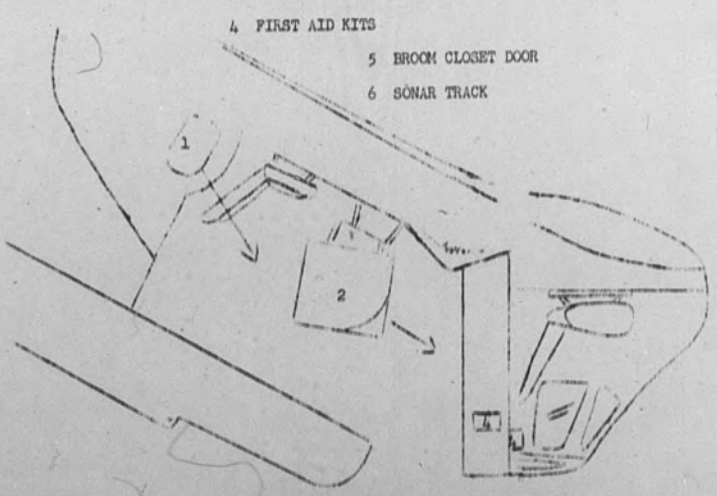
2 SONAR EQUIPMENT

3 DECKING RECOVERED WITH FORWARD SONAR TRACK

4 FIRST AID KITS

5 BROOM CLOSET DOOR

6 SONAR TRACK



SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

PART VII - THE INVESTIGATION (CONTINUED)

LCDR HUGHES:

DAY	BRIEF TIME	SCHEDULED T/O	SCHEDULED LANDING	T/O	LANDED	ACTUAL FLT
16	1200	1300	1630	1250	1430	1.6
17	NO FLY					
18	2100 (moved up to 1900 then delayed)	2200	0030	2322 59 32	2358 54 (Impact time)	0.6

LTJG [redacted]

DAY	BRIEF TIME	SCHEDULED T/O	SCHEDULED LANDING	T/O	LANDED	ACTUAL FLT
16	0600	0700	1100	0655	1114	4.3
17	NO FLY					
18	NOT SCHEDULED	NOT SCHEDULED	NOT SCHEDULED	2356	2358 (Impact time)	0.1

(Notified at 2215 regarding flight)

The master schedule was not adhered to the night of the accident and the launch was delayed approximately four hours.

The deceased pilot had a two hour nap in the afternoon, ate the evening meal, and rested in the ready room two hours just prior to manning the aircraft. The co-pilot LTJG [redacted] had approximately one hour's notice prior to the launch. Prior to flight he commented that he was fatigued. The pilots and crewman involved were qualified to perform the mission (see enclosures (25) and(26)).

The aircraft, SH-3A(HSS-2) BUNO 149004 (AW 52), was initially manned with haste at 2305 by LCDR HUGHES (pilot) and LTJG [redacted] (qualifying co-pilot) LCDR HUGHES, LTJG [redacted] and BLYTHE, ATN3 preflighted their aircraft, helo 52, finding no discrepancies. After strapping in and going through the cockpit check list, the turnup was normal and rotors engaged at approximately 2322. Wind was 15 knots down the angle deck (see enclosure (9)).

LCDR HUGHES took off, flew five miles ahead of the ESSEX and relinquished control of the aircraft to his co-pilot, LTJG [redacted] who flew for the remainder of his carrier qualifications, completing three landings. NATOPS procedure was deviated from in that the qualifying pilot flew from the left seat. At approximately 2354 LCDR HUGHES took control of the aircraft on deck during an unusually fast switch of co-pilots and remained in control until impact of the aircraft with the water.

The weather at the time was VFR to the port, starboard, and astern of ESSEX with a visibility of 3 miles plus. Sea state was undetermined due to darkness. The wind was from 169 degrees true at 23 knots. The density altitude was plus 1600 feet (see enclosures (23) and (24)). ESSEX tower was cleared by the Bridge to hold "52" on deck until through rain showers but "52" launched while PriFly was preparing to transmit "Hold on deck". Following the launch helos "52" and "61" were given "Signal Charlie" by PriFly and told to return and wait out thunderstorms on deck.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

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PART VII - THE INVESTIGATION (CONTINUED)

The co-pilot noted no unusual turbulence or lightning flashes during the flight. The pilot was aware that part of the bounce pattern was IFR and did not seem to be apprehensive about being on instruments while in the carrier qualification pattern. At one time in the upwind turn the co-pilot had vertigo which was cleared up when he crosschecked instruments. He noted at that time an altitude of 200 feet on the RADALT, an airspeed of 90 to 95 knots and an angle of bank of 15 degrees to the right. The pilot appeared to be completely on instruments in the upwind turn.

One observer saw the aircraft crash and states a gradual descent was made toward the water. One red light, not believed to be a rotating beacon, moved rapidly upward prior to or at the time of initial contact. Then the rotating beacons appeared to rapidly exchange positions.

The co-pilot felt an attitude change in the aircraft and checked instruments. He saw the RADALT needle dropping rapidly through 80 feet, a movement which he described as "unbelievably fast". He threw his arms in front of his face and the aircraft contacted the water.

The crewman occupied the starboard (1st operators) seat at the time of impact. Permission to leave the seat had not been requested.

The aircraft made contact with the water two times, becoming uncontrollable following initial impact, completely breaking up and sinking immediately upon second impact with the water. The co-pilot's seat broke loose on second impact and he was thrown violently about the aircraft. He does not know how he exited the aircraft, being able to describe only "clawing through great piles of debris". The co-pilot and pilot lost their AFH-5 protective helmets during the crash.

At the time of the crash the aircraft was in a rainshower. The relative bearing from the ship was 050 degrees at a distance of approximately 2300 yards. The ship's course and speed at the time of crash was 000°T at 18 knots.

LTJG (b) ignited two night signal flares, the first as "61" approached and the second when he felt the DD had him in sight. He climbed into an inverted floating sponson while awaiting rescue and utilized his whistle for signalling. Upon approach of the USS MANLEY (DD 940) the sponson was abandoned a nd he swam toward the DD. The MANLEY picked him up in the ship's motor whaleboat. Pilot and crewmember where not recovered and are presumed to have drowned.

The pilot was known to be very confident of his ability to fly under any conditions and is not known to have had any personal problems that would have kept his mind preoccupied the evening of the flight.

Crash debris recovered included the following and damage thereto:

(1) Starboard sponson and landing gear. Damage: Nose smashed in - inboard tail smashed. Support broken off. Landing gear down and intact.

(2) Port sponson and landing gear. Damage: Nose smashed all the way back to the first complete bulkhead. Dent in top rear. Landing gear down and intact.

(3) Seat assembly, Sonar Operator, Left side, Reel locked. Right back support member and seat bent forward (see enclosure (16)).

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D.

PART VII - THE INVESTIGATION (CONTINUED)

(4) Gyro compartment hatch

(5) Water bag for windshield washer

(6) Small pieces cloth insulation

(7) Pieces of cabin overhead sound proofing board

(8) One small piece of electronics compartment mounting deck - honeycomb

(9) Pieces of doppler antenna cover - fiberglass

(10) Padding from inside doppler case - sponge rubber

(11) Drain tube (plastic) from spillage pan under transmission

(12) Fiberglass access panel port side main transmission fairing

(13) Cabin decking - forward port panel - impaled by port seat track from under side (see enclosure (16)).

(14) Cabin decking - forward center panel - bent upward and across (see enclosure (15)).

(15) Cabin overhead sound proofing panels

(16) Two seat cushions (bottom)

(17) Three seat cushions (back)

(18) Two first aid kits

(19) One "broom closet" door (Aux Servo Compartment door)

An investigation into the aircraft's history revealed that helicopter SH-3A(HSS-2) BUNO 149004 side number "52" was accepted by BUWEPS on 31 October 1961 and transferred to HELASRON NINE on 8 December 1961. The last aircraft inspection undergone prior to the subject accident was a Calendar Intermediate begun on 13 September 1962, and completed 26 September 1962. Aircraft Service Changes and discrepancy history are discussed in enclosure (13). There were no recent "yellow sheet" gripes by pilots on Radar Altimeter. In that there is a slight possibility of Radar Altimeter failure a complete analysis of "yellow sheets" regarding the Radar Altimeter malfunctions and corrective actions taken are listed.

MALFUNCTION		CORRECTIVE ACTION
4-18-62	RAD ALT DOWN	REPLACED FUSE
	NO INDICATION	

This aircraft flew 11 flights for a total of 25.5 hours before next Radar Altimeter malfunction.

4-25-62	RAD ALT INTERMITTENT	SOLDERED BROKEN
	CAME ON AT FINAL LDG.	WIRE ON PLUG

This aircraft flew 10 flights for a total of 19.9 hours before next Radar Altimeter malfunction.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

PART VII - THE INVESTIGATION (CONTINUED)

MALFUNCTION		CORRECTIVE ACTION
5-7-62	SONAR ALT READS 30 FT WHEN RAD ALT READS 40 FT	CHECKS 4.0 UNDER SIMULATED DIP CONDITIONS

This aircraft flew 9 flights for a total of 19.4 hours before next Radar Altimeter malfunction.

5-14-62	RAD ALT INTERMITTENT DURING FLIGHT	CHECKS 4.0 ON DECK

This aircraft flew 6 flights for a total of 14.4 hours before the next Radar Altimeter malfunction.

5-21-62	RADAR ALTIMETER CYCLES CONTINUOUSLY	CHECKED ON BENCH, TIGHTENED CABLES, CHECKS 4.0 IN AIRCRAFT

This aircraft flew 5 flights for a total of 10 hours before going into first Calendar Major Inspection 6-11-62. Inspection was completed on 7-30-62 and a test flight of 2.8 hours was flown. Following this, 5 flights with a total of 12.5 hours were flown before the next Radar Altimeter malfunction.

8-4-62	RADAR ALTIMETER DOES NOT WORK	REPLACED ALT FUSE CALIBRATED

This aircraft flew 26 flights for a total of 61.7 hours without any further malfunction of the Radar Altimeter prior to the accident.

The helicopter had a full fuel load on initial take off with an estimated gross weight of 16,830 pounds. An estimated fuel consumption of 500 pounds per engine hour would put the weight of the helicopter at the time of the accident at approximately 16,230 pounds.

PART VIII - THE ANALYSIS

A. Personnel Factors

With the exception of the Flight Surgeon the Board feels that the cause of this accident was pilot disorientation. Although unable to determine concrete facts on which to base this conclusion, certain facts point in this direction. The co-pilot did not see the pilot after they had passed the 90 degree position of the up-wind turn and does not know whether the pilot remained completely on instruments. [redacted]

This was the point at which LTJG [redacted] got an uncomfortable "seat of the pants" feeling and noted a change in aircraft attitude. The pilot's reaction came too late or was not adequate to cope with the situation. The aircraft contacted the water, broke up and sank.

According to the "Handbook of Aerodynamics for Naval Aviators", NavWeps 00-80T-80, a 15 degree angle of bank, airspeed 90 to 100 knots will result in a turn radius of approximately 2800 feet, as illustrated in enclosure (28). This supports the Board's contention that the angle of bank was not increased to hasten landing aboard the ship, with the possible exception of the last few seconds before the crash.

PART VIII THE ANALYSIS (CONTINUED)

It is not definitely known how much of a factor fatigue was in this accident. The pilot slept approximately eight hours the day of the crash and seemed to LTJG (b) (6) to be alert. He may or may not have been fatigued, however, it is noted that he was asleep when the word to "man aircraft" was passed. The Board is unanimous in its conclusion that a four hour wait in the Ready Room for the word to "man aircraft" is fatiguing.

(b) (5)

(b) (5)

An adequate scan is essential to safe flight at altitude in the vicinity of 200'.

The co-pilot did not develop an adequate crosscheck of cockpit instruments. In the upwind turn the aircraft was IFR. Being able to see nothing outside and having experienced vertigo he should have turned his attention more frequently to the instruments.

LTJG (b) was not scheduled to fly originally but was later notified (approximately one hour prior to flight) that he was to switch seats with LTJG (b) (6) and night carrier qualify. While waiting in Flight Deck Control for the signal to switch pilots, he commented that he was "tired". (b) (5)

(b) (5)

Weather encountered in the upwind turn may have contributed to the accident in that the forward rotating beacon reflecting off precipitation is distracting.

B. Supervisory Factors

It is felt by the Board that (b) (5)

(b) (5)

(b) (5) Twenty-five minutes is not considered sufficient time to pre-flight and turn-up an SH-3A for night operations. No other supervisory factors are considered relevant in this accident.

C. Material Failures or Malfunctions

Material failures or malfunctions are not considered to be a cause factor in this accident by the majority of the Board. A minority statement is made under PART IX, COMMENTS, by the Flight Surgeon. The investigation revealed a prior history of six (6) RADALT discrepancies over a period of six (6) months and in each case the equipment was properly repaired and written off by maintenance. No RADALT discrepancies appeared for two and one-half months including an intermediate inspection, prior to the accident. The aircraft was in an "up" status when accepted by the pilot and the RADALT was operating properly on takeoff (see enclosure (2)).

Rapid unwinding of the RADALT through 80' was noted by the co-pilot. It is believed this resulted from a rate of descent of the aircraft toward the water coupled with a rolling of the aircraft toward straight and level flight.

Although not positively known to have contributed to the crewman's death it is believed that the sonar dome and associated equipment shifted forward upon impact of the aircraft with the water, breaking the crew seats from their moorings and inflicting severe damage. (enclosures (16) and (17)).

D. Facilities

The Board feels the action taken by the ship in holding the flight was correct but initiated too late.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

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PART VIII - THE ANALYSIS (CONTINUED)

E. Survival Factors

All survival equipment involved in the accident worked properly with the exception of the pilot's and co-pilot's APH-5 Protective Helmets which came off on impact in spite of the fact that the chin and nape straps were tight (see enclosures (21) and (22)). In addition to his helmet the co-pilot lost his gloves, revolver and flashlight. Although the equipment pockets on the co-pilots Mae West had been partially torn away (enclosure (20)), he was still able to locate and utilize all of the survival equipment needed.

LTJG (b) saw a sponson floating inverted, swam to it, and climbed into the wheel well to await rescue. He began blowing his whistle, which, according to the Commanding Officer of the MANLEY, was of great value in locating him. On approach of the rescue craft LTJG (b) abandoned his make-shift raft and swam toward the boat. This action is considered improper in that he was bleeding and in shark infested waters. He was lifted physically from the water, into the ship's whaleboat, placed in a "stokes" stretcher, and taken to sickbay aboard the MANLEY.

PART IX - COMMENTS

A. The majority of the Board feels the primary cause of the accident is personnel factor. It is believed the pilot maintained both a contact and an instrument flight scan, and gradually descended in a right turn until collision was made with the water. Radar Altimeter failure cannot be completely discounted, but if a proper scan had been utilized, any malfunction of this component would have been noticed.

As a contributing cause factor the co-pilot failed to integrate a scan of the instrument panel with his attempt to remain contact.

B. The Flight Surgeon does not concur with the majority of the Board as to the primary cause of this accident. His statement follows:

(b) (5) [redacted]

In reconstructing this case, we know from the survivor's narrative and from eyewitness reports that the plane lifted off the deck and progressed in its flight under control. The plane flew into instrument weather, and the co-pilot states that when he looked at the pilot, he was on the instruments. Flying this aircraft under such conditions requires a scan pattern to cover the Vertical Gyro Indicator, RADALT, and airspeed indicator. This flight had no abnormal characteristics or sudden or erratic attitude changes involved, [redacted]

(b) (5) [redacted]

(b) (5) [redacted] The co-pilot turned to the RADALT, saw it rapidly passing through 80 feet toward zero, and then they hit the water.

(b) (5) [redacted] the co-pilot described the speed with which the Radar Altimeter needle went through 80 feet as "unbelievably fast". The witness description of the flight path show no

PART IX - COMMENTS (CONTINUED).

part of it as having any such rapid altitude loss. Also, the co-pilot was looking out of the cockpit, and felt the attitude change before he looked at the RADALT. (b) (5)

(b) (5)

The majority of the investigating Board feels that the primary cause of this accident was pilot error in that he did not maintain a complete instrument flight during IFR conditions. They feel that he was alternating between visual contact and instrument scan and did not appreciate the altitude loss. They feel the natural tendency for a pilot turning right is to look out to clear himself, and also in this case, to visually check the location of the aircraft carrier.

(b) (5)

The altimeter source operates perpendicular to the cross axis of the plane, and so if the plane is banked, the slant angle would produce a falsely high altitude reading.

(b) (5)

Investigation of these two points brought up these facts:

a. In order to measure the possible error introduced into the RADALT by the slant angle, we can set up a right triangle. The hypotenuse is the altimeter reading, the actual altitude the side to be solved for, and the amount of bank the angle. We solve for the unknown by using the tangent of the angle times the known hypotenuse, which we put at 80 feet.

For 15degrees, the actual altitude is 77 feet.
For 30degrees, the actual altitude is 69 feet.
For 45degrees, the actual altitude is 49 feet.

(b) (5)

(b) (5)

C. Deviation from the NATOPS Manual, i.e., flying the qualifying pilot from the left seat instead of the right was authorized by the Commanding Officer of HELASRON NINE.

D. It is noted that a conflict exists between the wind as given by aerology (enclosure (23)) and wind across the deck during launch (enclosure (9)).

PART X - RECOMMENDATIONS

1. That initial carrier qualifications be conducted under as near ideal VFR conditions as possible.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

HS-9 AAR SER 1-62 18 OCT 1962 SH-3A (HSS-2) BUNO 149004 PILOT HUGHES

PART X - RECOMMENDATIONS (CONTINUED)

2. That the ship's master schedule of flight operations be adhered to and not be unnecessarily extended for long periods during the training cycle.
3. That CIC keep PriFly and the Bridge advised continously of weather during night carrier qualifications, when marginal conditions exist.
4. That force tests be conducted to determine structural failing of the retention points of the seats and sonar of the aircraft.
5. Reiterate that pilots and crewman should remain in flotation equipment until rescued by surface craft.
6. Emphasize that the instrument scan pattern should include a definite cross check between Rad Alt and Bar Alt.
7. Recommend marking seats and seat cushions by position in the aircraft to better facilitate accident analysis.
8. That an audible warning signal in addition to the red light be investigated for incorporation with the Radar Altimeter.
9. That attached but removable panels of Styrofoam or similar material be attached to the aircraft between frames and in the void areas to insure flotation even though the aircraft breaks up.
10. That no excess equipment(i.e. crews' tool boxes, boots, lines, PDC's, Smoke lights etc.) be carried in the aircraft unless securely fastened to prevent its becoming a missile or an escape hazard. It is further recommended that BUWEPS expedite investigation and installation of storage containers or racks within the aircraft.
11. That the following be continually emphasized: flying a helicopter at night at low altitude and especially over water must be an instrument evolution. Operation of this aircraft is a two pilot job. The pilot in control must constantly maintain an instrument scan, and the other pilot must realize his responsibility for monitoring of the instruments.
12. That the forward rotating beacnn be turned off when actual IFR or marginal VFR weather is encountered at night.
13. That due to the number of accidents on record in helicopters that have been attributed to pilot disorientation, a group of human design engineers reevaluate the instrument panel arrangement as a possible cause of this problem.
14. That the officers and men of the USS MANLEY (DD-940) be commended for their action in picking up the survivor.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

Statement of LTJG (b) (6) USNR, (b) 1315, concerning HELASRON NINE AAR 1-62 occurring 10 OCTOBER 1962.

At approximately 1200 I checked to see if I was to fly. The SDO informed me I was not scheduled. About 2215 I received a call from the SDO telling me to get into my flight gear and prepare to switch seats in an aircraft already carqualling. I went to the ready room and was informed I was the next to switch. I went directly to flight deck control. They refueled "52" and launched about 2330. After the co-pilot had qualified I switched seats with him. The aircraft was on deck about a minute and a half. We lifted off and proceeded upwind. The pilot informed me that from this point on we would probably be IFR upwind and not break out of it until downwind. About 10 seconds later we got into the soup.

We were totally IFR. The ship called, saying "return to BANKNOTE and land until we clear the weather", or something to that effect. The pilot called "61" and asked for his position. "61" replied that he was about a mile ahead of us. The pilot initiated a 15 degree right bank and informed "61" he was turning right. I assumed he turned right to provide separation between the two aircraft as they returned to the ship.

At this point we were still IFR. I suffered a slight touch of vertigo. I was contact and the pilot was instruments. All I could see was our own running lights and rotating beacon in the soup around me. I felt we were straight and level and crosschecked the VGI which indicated we were in a 15 degree right bank. I also noted the RADALT to be at 200 ft. I think our airspeed was 90-95 kts. although I'm not sure I visually checked the airspeed indicator. I was no longer suffering from vertigo and went contact again trying to regain visual contact. About 10 seconds after this I felt a definite change in altitude. Things did not feel right in the seat of my pants. I checked the RADALT and saw it pass through 50ft. dropping rapidly toward zero. I saw it pass 30ft and we hit the water. It was unbelievably fast. I had looked at the pilot only once after his initial bank and he appeared to be completely on instruments. Whether he stayed on instruments or not I don't know. We hit the water in what I believe to be a right-wing down altitude. Immediately I smelled JP-5. I felt something hit me in the nose which I believe to have been my hard hat.

After initial impact we bounced back into the air and seemed to go through several gyrations before we hit the water once again. On the second impact I don't know in what position the aircraft contacted the water. I was thrown violently about the cockpit. I had the impression my seat had torn loose and I was completely disoriented as to my position in the aircraft. At this point I felt water at my feet. It rose very fast but I was able to take a deep breath before I was completely submerged. I waited approximately two seconds, undid my lap belt and reached toward the left to locate the escape hatch. After a struggle I managed to get through one opening to find I had to go through another. It seemed as though I passed through three chambers before I cleared the aircraft. All the way up I kept running into great piles of debris which I managed to claw my way through. I finally reached the surface and found myself in JP-5 plus a great amount of debris from the aircraft. I had no difficulty in locating and actuating the toggles to my Mae West. The CO2 didn't quite fill my vest so I inflated it orally. I yelled in an attempt to locate the pilot but received no response. At this point I took stock of what I had and found I had lost my hardhat, flight gloves, flashlight and my revolver. I felt for the front of the Mae West in an attempt to locate the night flares but found the pockets had torn loose at the top from the Mae West. Once I found the flares I had no difficulty in locating the night end. I fired my first flare as "61" approached me. He circled once and turned back toward the carrier. At this point I looked around and noted a sponson floating inverted 10 yards from me. I swam over to it and climbed into the wheel well. It was quite buoyant and served well as a makeshift raft. I started looking for my whistle, located it with no difficulty and began blowing. At this time I also turned on the light on my Mae West which worked intermittently. I had to shake it to keep it from going out.

ENCLOSURE (1)

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I waited until I saw search lights from the two closing destroyers to fire my second flare. All I did then was sit tight and continue blowing my whistle. The search lights from the USS MANLEY picked me up shortly thereafter and the ship closed me. They stopped dead in the water aproximately 40 yards from me. I was off their starboard beam. I abandoned the sponson and started swimming toward the ship. They threw several lines in my direction, one of which finally came over my shoulder. I grabbed hold and was pulled to within ten yards of the ship. I was advised there was a whaleboat in the water on the port side and it would pick me up shortly. Pickup by the boat was accomplished quickly and without incident. I was lifted physically into the whaleboat and was placed in a stokes stretcher. The whaleboat was taken to the port side and lifted aboard the destroyer. I was taken to sickbay where two corpsman and a doctor from the BASILONE cleaned me up. The MANLEY turned immediately toward Guantanamo Bay where I was hospitalized.

The skipper of the MANLEY disclosed that the second red flare indicated my position and he homed in on my whistle. I estimate that 30 seconds elapsed between the time the pilot transmitted his intention to turn right to "61" and the time we struck the water. Fifteen minutes elapsed between the time I found myself in the water and the time I was picked up by the MANLEY.

(b) (5) [redacted]

(b) (6) [redacted]
LTJG USN

The above statement was procured from LTJG (b) [redacted] in the Guantanamo Bay Naval Hospital by a member of the Accident Investigation Board and is certified to be a true statement.

(b) (6) [redacted]
LCDR USN Senior Board Member

SPECIAL HANDLING required in accordnace with Para 70, OPNAV INST 3750.6D

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Enclosure (1)

Statement of LTJG (b) (6) (b) (6) USNR, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

After briefing at approximately 1915 for a night carqual hop, the scheduled pilots remained in the ready room until manning aircraft at approximately 2305. During the time interval between briefing and manning aircraft I observed LCDR HUGHES sleeping in a chair in the ready room and he was asleep when we got the call from AirOps to man aircraft. I proceeded to the aircraft and commenced preflighting while LCDR HUGHES signed the yellow sheet. Mr. HUGHES joined me in about five minutes and we completed the preflight finding no discrepancies. We then strapped in, LCDR HUGHES in the pilot's seat, and started through the check list. Turn up was normal and the rotors engaged at 2322. We were cleared to lift about five minutes later and proceed five miles ahead of the ship and then fly down the port side to check the "red carpet" lighting of the flight deck. LCDR HUGHES made the take-off and proceeded according to instructions. I took the controls when we were approximately five miles ahead of the ship and flew the remainder of the hop. After checking the "carpet" lighting, I flew three passes in the landing pattern, all of them to touchdown, the last being a final landing whre I was relieved by LTJG (b) at approximately 2345. Weather during the period was variable; there were numerous rain showers in the area and at times I was flying on instruments; we never lost sight of the carrier however. When I departed the aircraft, the ship appeared to be heading directly for one of these rain showers; I would estimate the distance at about one mile. LCDR HUGHES did not appear inattentive or sleepy throughout the hop even while I was flying. I observed no malfunctions or discrepancies in the aircraft at any time other than the TACAN being 20 degrees off in bearing.

(b) (6)

LTJG USNR

LTJG (b) (6) was designated a Naval Aviator 1 February 1960. He has accumulated a total of 971 Flight hours of which 759 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (2)

STATEMENT of LTJG (b) (6) USNR, (b) 1315, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962

At 2322R on the night of 18 October 1962, I was launched from the USS ESSEX (CVS-9) as pilot in command of SH3A (HSS-2) BUNO 149681, side number "61" for a scheduled carqual flight. The other aircraft on the launch was SH3A (HSS-2) BUNO 149004, side number "52", with LCDR J.R. HUGHES pilot in command. The brief for the flight called for Mr. HUGHES and myself to remain in our respective aircraft while as many other pilots as possible qualified in the alloted time period.

After launch, primary directed both aircraft to proceed five miles ahead of the ship to check the intensity of the "red carpet" lighting. Upon completion of the lightingcheck, both aircraft were given a "Charlie" for carquals. The weather was generally good with a definite horizon, except for scattered showers with associated lightning flashes. Each aircraft completed three landings, at which time "52" remained on deck to switch pilots. Since my co-pilot, LTJG (b) needed three more landings, we took off again to continue carquals. At this time, primary directed me to proceed ahead of the ship to check visibility in a rainshower which was rapidly approching the ship. I "rogered" this and flew to a position of 340 degrees relative, 1.5 miles (TACAN FIX) then reversed course to the left so as not to lose sight of the ship. After leveling out, primary called both aircraft and told us to return and land. Both aircraft acknowledged. At this time I saw two rotating beacons off my port beam which I assumed to be "52". I called "52" and asked him if he was airborne ahead of the ship. "52" answered in the affirmative and told me to turn right. I "rogered" this and we commenced a right turn in order to clear the area to port of the ship so "52" could land. No further radio transmissions from "52" were heard by either Mr. (b) or myself. About the time I passed abeam the fantail, primary started calling "52" with no response. Primary then called me and told me that there was a red flare in the water off the starboard beam of the ship. I then took control of the aircraft, commenced a left turn, ordered the hoist rigged, the doppler turned to the transmit mode and headed for the flare which by this time I had in sight. Shortly before arriving at the flare it went out; however, I was able to see what appeared to be a life vest flashlight on the water. I made one pass over the site and reported my findings to primary. Primary then ordered me to return to the ship and land, which I did.

(b) (6)

LTJG USNR

LTJG (b) (6) was designated a Naval Aviator 17 December 1958. He has compiled a total of 1448 flight hours of which 1208 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA. 70, OPNAV INST 3750.6D

STATEMENT of LTJG (b) (6) USN, (b) 1310, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

We turned up and launched after "52" (BUNO 149004) at approximately 2325R. The tower instructed us to go out 5 miles and return and pass down the port side of the ship and report on the "Red carpet" lights. "52" received the same instructions. We flew between 500 and 800 feet through changing weather varying from VFR with a silvery sea to total IFR and no horizon. There was strong lightning in isolated thunder showers and mild turbulence. We were given the signal to land but with a red light aft so we made two passes to a wave-off. The weather was the same, intermittent IFR-VFR. Altitude in the pattern was 350 feet to 400 feet and 70 knots air speed. I had done almost entirely all of the flying from the left seat since I was qualifying. I remained on instruments until passing the 90 degree position on each pass. On my third landing I landed aft of "52" while they changed co-pilots. I took off while "52" was still on deck and made a short go-round since I was not first in the pattern. Somewhere after the upwind turn, I heard "52" tell us to turn right. After no more than 90 degrees of turn, I heard the tower call "52, 52, Banknote tower over" and after a short pause, "61 do you read?" LTJG (b) (6) "Rogered". Immediately afterwards the tower said there was a flare off the starboard bow. I immediately turned left and crossed the stern of the ship heading toward the flare. LTJG (b) (6) then took the controls. As we passed over the flare, I could see a small white light next to the flare which I assumed was a MAE WEST flashlight. We went into a right turn and were ordered to return to the ship. While Mr. (b) (6) made his approach, I saw a second flare in the same vicinity and heard the tower report the same. I estimate the accident occurred at 0010 and we landed at 0015.

(b) (6)

LTJG USN

LTJG (b) was designated a Naval Aviator 1 March 1961. He has compiled a total of 604 flight hours, of which 386 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (4)

STATEMENT of LT (b) (6) USNR (b) 1315, concerning HSLASRON NINE AAR 1-62 occurring 18 October 1962.

On 18 October 1962 I assumed the duties as Flight Deck Officer at 2000. At approximately 2325 I launched side numbers "52" (BUNO 149004) and "61" (BUNO 149561). Shortly thereafter I observed the aircraft in a port orbit forward and port of the ship. A few minutes later primary Fly informed me we had a white flag aft, and helo night bounce commenced. "52" was first aircraft in the pattern and he made a lawing followed by "61". They each made a second approach and landed. On "52"'s third approach primary informed me that he was a full stop for switch pilots. I landed him and held him on deck while the co-pilots switched. Upon his signal he was ready to lift (turning off and then quickly back on his running lights), he was launched to continue the night qualification pattern. Throughout the period the wind was light with scattered light rain showers.

(b) (6)

LT USN

LT (b) was designated a Naval Aviator in August 1957. He has compiled a total of 1891 flight hours of which 297 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 7O, OPNAV INST 3750.6D

ENCLOSURE (5)

Statement of LT (b) (6) 1310, USNR, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

I was at the flight deck hatch to flight deck control when HSS-2 side number 52 BUNO 149004 took off. I observed 52 cross the bow port to starboard. I moved around in front of the island and watched 52 continue across the bow and start down wind on the starboard side. It got lower and lower, but always seemed under control. I then observed what seemed to be an abrupt pull-up. The pull-up was indicated by a red steady light. It disappeared then I saw two rotating beacons rapidly swap position such as an aircraft spinning one half of a turn. I cupped my ears and heard rotor blades hitting water or loudly flapping. I rushed to Flight Deck Control and told them I thought we had a helo in the water. I then went back and scanned the area where the helo went in. A lightning flash (double bolt) momentarily blinded me and then I observed a stationary red flare in the water. I informed LT (b) to keep the flare in sight. I returned to flight deck control and verified the helo in the water. Being the HS-9 CDO, I then proceeded to Ready Room #1 and notified those concerned about the accident.

The impact was 45-50 degrees off starboard bow at about 800 yards. The flare appeared at 60-70 degrees off the starboard bow and tracked to about 90 degrees when I left to go below to the Ready Room.

(b) (6)

LT USNR

LT (b) (6) was designated a Naval Aviator December of 1953. He has accumulated 3382 Flight hours of which 235 have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

Statement of LT (b) (6) USNR, (b) 1315, concerning HELASRON NINE AAR 1-62 occurring 18 OCTOBER 1962.

On the evening of the accident, I left the ready room to report to the flight deck and stand-by for a co-pilot switch. I proceeded up the ladder and emerged on the flight deck by flight deck control. It was raining and lightening very hard, and there was much confusion around the forward part of the island area because of men trying to protect themselves against the elements by standing close to the island structure.

Within 10 seconds after emerging from the island, LT (b) (6) ran back saying "They are going in, They are going to crash. Somebody call the CO". Then LT (b) (6) spotted me and told me to keep an eye on the bearing and pointed to about 085 degrees relative and then he left. I stared out into the darkness and the only thing I saw was lightening. After about 2 minutes I thought I saw a very small faint white light. The next light I saw was a red hand flare, and I noticed it drifting aft. The second helo of the flight was over the scene by the time the flare had become extinguished. The second helo did not stay over the scene, but returned at which time I went to the #3 elevator to get a better look. The next time I saw a flare it was about 170 degrees relative and a destroyer had also sighted it. The scene was too far away to see what was actually happening.

(b) (6)

LT USNR

LT (b) was designated a Naval Aviator April of 1950. He has accumulated 947 flight hours of which 600 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (7)

STATEMENT of LCDR [redacted] 1110, USN, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

On the afternoon of the 18th of October 1962 LCDR HUGHES departed Ready Room #1 at about 1330 and stated that he was going to his room for a nap, since he was scheduled for the evening launch. I returned to our room at about 1600 that afternoon and found him asleep. I turned in for a nap at that time as I was scheduled for the same launch (2200). LCDR HUGHES awoke and left the room at about 1615. At 1800 he returned and woke me stating that our brief time had been moved up to 1900 and that we should eat in flight gear in order to make brief time.

We arrived in Ready Room #1 at about 1900 for our launch brief. We were informed that the launch would be delayed and to stand by. We were scheduled for night helo carrier quals. LCDR HUGHES departed the ready room at about 1930 and returned at about 2100. He sat down and was apparently asleep until awakened to launch. He was scheduled to fly with LTJG [redacted] and LTJG [redacted] and LCDR [redacted] in that order. When the ready room was informed that LCDR HUGHES was airborne, LTJG [redacted] and I went to flight deck control to stand by to switch pilots. LTJG [redacted] commented that he was rather tired and that he was scheduled for an early FDO watch the following morning. After LTJG [redacted] was in the aircraft I observed the following: Helicopter side number 61, launched from the fantail area and flew parallel to the ships heading on the port side. Soon thereafter Helicopter side number 52 launched from near amid ship and paralleled the ships heading on the port side. At this point I lost sight of Helo 61's lights since the ship was heading into a rain shower area. Helo 52 crossed the bow of the ESSEX in a shallow right turn. The HS-9 Command Duty Officer, LT [redacted] was standing near me and commented that Helo 52 appeared to be descending. The lights on Helo 52 looked rather fuzzy as it was in a rain shower and did appear to me to be in a shallow right turn - descending. At this time I lost sight of Helo 52 and went to a position on the starboard side of the ship through Flight Deck Control. As I reached the rail a flash of lightning appeared from the direction I last saw Helo 52, temporarily blinding me. I never regained sight of Helo 52's lights. Shortly thereafter a red glow appeared in the water on a bearing of approximately 110 degrees relative to the ships heading. Two destroyers were heading for this area and the ESSEX was starting to back down. LTJG [redacted] was reported to be rescued from the sea and the search continued until approximately noon on the 19th of October.

[redacted]
LCDR USN

LCDR [redacted] was designated a Naval Aviator in June 1951 and has compiled a total of 3198 flight hours of which 180 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D.

STATEMENT OF CDR (b) (6) USN, Air Officer USS ESSEX (CVS-9), concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

On Thursday night 18 October 1962, I was in Primary Flight Control conducting helicopter carrier qualification landings. Two (2) planes were in the carrier qualification pattern, side numbers "52" and "61". The helicopters launched at 2328, wind 15 knots down the angle deck. "52" had made landings at 2349, 2351, and 2354. After the 2354 landing the aircraft was held on deck for a single pilot switch. "61" had made 3 landings, the last one was made at 2355. After the launch from the 2355 landing, I instructed "61" to proceed up wind and give a weather report.

While "52" was still on deck, the Bridge called on the 1OJG sound power phone circuit and stated that 3 miles ahead there was a rain shower. There was a good horizon to the port, starboard and astern, but ahead there was no definite horizon. I recommended that "52" be held on deck and "61" be recovered and that both aircraft be held on deck until we were through the rain shower. Bridge concurred with this and as I started action to hold "52" the aircraft lifted; time 2356.

Just after "52" lifted and while along the port side of the ship, I informed both 52 and 61 of the weather ahead and also cleared both aircraft for landing and stated that we would hold both planes on deck until clear of the rain shower. Both aircraft acknowledged and "61" reported that there was reduced visibility ahead.

"52" proceeded ahead of the ship and I could see "61" approximately 2 miles ahead slightly to port. I instructed "61" to turn on his "Grimes Light" and he conformed. "61" reported that he was just ahead of a destroyer which was approximately 1½ miles about 15 degrees to port of the ESSEX. "61" asked "52" if he was ahead of the ESSEX with "Grimes Lights" on. "52" reported that this was his position. I had both aircraft in sight, "52" approximately 1 mile ahead of the ship 150 to 200 ft, and"61"approximately 1½ miles 15 degrees to port.

I understood "52" to state that he was turning down wind to starboard, "61" "rogered" and said "turning starboard". I watched "61" as he proceeded downwind along the port side. Within a few seconds after the radio communications between "61" and "52", a bolt of lightning illuminated the sky. Within seconds after the lightning a report came over the sound power phone that there was a possible HSS in the water off the starboard bow. I called "52" over the radio but no response I informed the Bridge of the report. I instructed "61" which at this time was at the 180 degree position to proceed to starboard and that "52" was in the water. As "61" proceeded around the stern I saw a flare off the starboard quarter. "61" proceeded to the scene and reported that he had the flare and a light in sight.

The Commanding Officer of HS-9 who was in Primary Flight Control requested that "61" be returned aboard. This request was passed to the bridge and approved. I instructed "61" to land aboard and he did so at 0001.

I did not see "52" start his turn to starboard nor did I see the aircraft lose altitude or hit the water. I saw no indications of survivors except for a flare. During the period of instructing "61", and relaying information to various other stations, I requested that the aviation boat crane be manned and a diver alerted. I observed the destroyer that was off the port bow proceeding around the stern of the ESSEX and proceeding to the scene of the crash. I could not determine the success of his rescue. "61" was kept in an alert status on the flight deck.

(b) (6)

CDR USN

CDR (b) has occupied the post of Air Officer aboard the USS ESSEX since 3 August 1961. He was designated a Naval Aviator February of 1944 and has accumulated a total of 3500 flight hours.

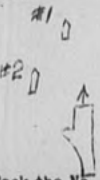
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 7O, OPNAV INST 3750.6D

ENCLOSURE (9)

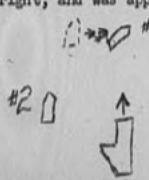
STATEMENT of LCDR (b) (6) 1310, USN, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

I was the oncoming Staff Watch Officer relieving the watch on the Flag Bridge at 2345 the night of the accident with BUNO 149004. I observed a red flare near the water about 1000 yards 070 degrees relative to the carrier at 2358. I estimate that this flare appeared between one and two minutes after a very bright flash of lightning from a nearby thundercloud. At about 0007, I observed another red flare at 120 degrees (relative) at a similar distance and altitude. By this time the rescue destroyers had been alerted and were in the area scanning the surface with search lights. The carrier had stopped, twisted to starboard and was assisting with searchlights.

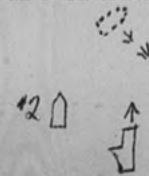
With respect to the carrier and the two destroyers, the events immediately prior to the first flare were as follows: The carrier had gotten a sonar contact and had turned to track it. CAMQUALS were secured and the rescue destroyers put into screen. On completion of that evolution, about an hour later, the screen was reoriented and the carrier turned to recommence CAMQUALS. The #1 destroyer proceeded to the wrong position and for about 10 minutes prior to the accident, during which pilot HUGHES shot several landings, the destroyers were oriented as shown below:



As co-pilot (b) was switching on deck the No. one DD was ordered by the screen commander to take station on the starboard bow. As BUNO 149004 lifted and proceeded forwarded of the bow, the No. one DD was crossing the bow, masthead and running lights bright, and was approximately dead ahead 500 to 1000 yards as shown below:



I did not observe BUNO 149004 again after that. At the time of the first flare a few minutes later, the No. one DD was in station as shown below:



At about 0020, the destroyer MANLEY had found and picked up co-pilot (b) by motor whale boat and the search continued for the pilot and crewman.

I have been standing staff watches for 1 year, have been a naval aviator for 14 years and have 4140 pilot hours.

(b) (6)

(b)

LDCR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70 OPNAV INST 3750.6D

ENCLOSURE (10)

STATEMENT of LCDR (b) (6) 1310, USN, concerning HELASRON NINE AIR 1-62 occurring 18 October 1962.

I lived opposite LCDR HUGHES from our departure from Quonset Point, R.I. until his death. Upon arrival in the Gitmo area, my room and his, 303 and 305 were very hot and humid. Very little air was being brought into our rooms by the vents. Mr. Hughes and I discovered that the fan was working but the hatch in the fan room was continually closed since it was an Xray fitting. We opened it as much as possible and complained to the Engineering Department but one of the engineering officers got upset and said "He didn't care what we did with it"to Mr. Hughes. The temperature was a constant 95 degrees by our thermometer and it was impossible to get a good nights sleep. We all felt tired and worn out each morning after sweating all night. I personnally tried to get some sleep in the ready rooms whenever possible.

The night LCDR HUGHES flew, I was co-pilot for LTJG [redacted] who was qualifying in an S2D aircraft for the first time. There was no horizon and we flew by instruments most of the time. It was a very nerve racking type flight for me with three near misses. There were 8 S2D aircraft in the same pattern.and at the same altitude. If I looked outside continually I got a small case of vertigo and had to go on instruments momentarily to get re-oriented.

(b) (5) [redacted]

I was designated a Naval aviator 3 FEB 1954 and have accumulated 2500 hours of flight time.

(b) (6) [redacted]

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (11)

Statement of LCDR, (b) (6) USN, OOD, USS ESSEX 0000-0004 watch morning of 19 October 1962 concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

At about 2359 on Thursday 18 October 1962, a report was received on the bridge that an aircraft had crashed into the water on the starboard side. This report was received from Primary Fly. Weather at this time was VFR with scattered thunderstorms. The Captain assumed the conn and maneuvered the ship to remain clear of the crash scene. Both CIC and Bridge held the aircraft on radar for a brief period and then lost the return. USS MANLEY (DD-940) and USS BASILONE (DD-824) proceeded to the scene of the wreckage to search for survivors. I observed a red flare on the starboard beam and saw a helicopter over it and USS MANLEY close the position. At about 0018 a report was received from the USS MANLEY that LTJG (b) (6) had been recovered. Injuries were reported as abrasions but no apparent broken bones. At 0239 I was relieved and left the bridge while the search continued.

(b) (6)

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

Statement of LCDR (b) (6) USN, HELASRON NINE, Maintenance Officer concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

SH-3A BUNO 149004 was accepted by the BUWEPS REP Stratford, Conn. on 31 OCT. 1961 and was transferred to HELASRON NINE on 8 December 1961. Since acceptance the aircraft had flown 246 hours, 236 hours in tour, and 36.5 hours since last inspection . The aircraft had undergone the following inspections: 3-12-62 Calendar Intermediate, 6-11-62 Calendar Major, 9-13-62 Calendar Intermediate. All applicable aircraft Service Changes had been incorporated with the exception of ASC-45 (replacement of main gear box oil cooler blower fan shaft). The aircraft had no history of discrepancies which might have contributed to the accident as described by the surviving pilot.

(b) (6)

LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

WEATHER SERVICE OFFICE
USS ESSEX CVS-9
% FPO N.Y.,N.Y.

DATE 18 OCTOBER 1962 TO HS-9

CEILING ESTIMATED 1000' OVERCAST TIME OF ACCIDENT 2358R

WEATHER RAIN SHOWERS RELATIVE HUMIDITY 87%

VISIBILITY 3 MILES SEA STATE UNKNOWN DUE TO DARKNESS

SEA LEVEL PRESS. 1012.5 mbs

AIR TEMP. 77.0°F

DEW POINT 73.0°F

SURFACE WIND DIR. 169° TRUE

SURFACE WIND VEL. 23 KNOTS

ALTIMETER 29.89

REMARKS FROM OBSERVER NONE

DENSITY ALTITUDE + 1600

OBSERVER: (b) (6) AN

(b) (6)

WEATHER SERVICE OFFICER
(b) (6) LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (23)

STATEMENT OF LCDR (b) (6) USN, METEOROLOGICAL OFFICER USS ESSEX (CVS-9) concerning HELASRON NINE AAR 1-62 occurring 18 October 1962

During the night of 18 October and the morning of 19 October, ESSEX was operating in an area of scattered shower and thundershower activity. Until approximately 2245R scattered clouds and unrestricted visibilities were observed at the ship proper. At 2300R a light rainshower was observed with the visibility estimated at 5 miles and the ceiling estimated as overcast at 1200 feet. This condition prevailed until shortly after midnight except that the visibility was recorded as 3 miles at 0000R. At 0015R a special observation was recorded as "1000 feet scattered, estimated 1500 feet broken, 6500 feet broken, 5 miles, light rainshower". Light rainshoweres were again observed at 0225R and very light showers were observed at 0400R.

Although the prevailing conditions were VFR, it is probable that instrument conditions existed in the heavier portions of the showers with visibility reduced to a mile or less and a ceiling of 800 to 1200 feet.

(b) (6)

LCDR USN

LCDR (b) (6) has occupied the post of Meteorological Officer aboard the USS ESSEX since 27 August 1962

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (24)

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

Resume of Duty Assignments and Flight Experience of LCDR HUGHES, USN, Pilot of SH-3A(HSS-2) BUNO 149004.

1. Name: James Robert HUGHES
2. Station: USS ESSEX (CVS-9)
3. Unit: Helicopter Anti-Submarine Squadron NINE
4. Age: 33
5. Date entered Navy: 29 September 1948
6. Date designated Naval Aviator: 1 October 1951
7. Qualifications: SH3A (HSS-2) HAPC 1 December 1961
8. Type Instrument Card: Standard, Expiration 1 January 1963
9. Summary of Experience as Naval Aviator:

Date		Duty Station	Duty
5-50	8-51	NAVBATRACOM Pensacola, Fla	Student
9-51	12-51	NAWTS Pensacola, Fla	Student
1-52	2-52	FAETULANT NorVa	Student
2-52	10-54	VS-27 NorVa	Pers. Off., AIO
10-54	11-54	BuPers Line Selection Board	Briefing Off on LT to LCDR selection
11-54	2-55	ITRU Pensacola Fla.	Instructor under Training
2-55	12-57	CNABATRA Pensacola Fla	Flight Instructor, Avia. Safety Officer
1-58	4-58	NAVSECGSTA Washington D.C.	NAVSECGRU Duties
4-58	9-60	NAVSECGRUDETCINCNELM London	NAVSECGRU Duties
9-60	2-61	CNABATRA, FAETULANT, HS-2 Key West, Fla.	Roughly 6 months of TAD consisting of basic helicopter training, tactics, course Refresher Air Group Pilot Training
2-61	Present	HS-9 Quonset Pt., R.I.	Flight Off., NATOPS Off., HAPC

10. Summary of flight time by type:

Type	Hours	Type	Hours
SNJ	500	HTL-6	?
SNB	150	HRS-3	1.0
AF	1100	HSS-1	?
T-28	?	HOK-1	0.8
TV-2	25	SH3A(HSS-2)	214.7
F6F	?	HO4S	?

Note: Types and Hours are taken from OPNAV FORMS 3760 -4 and Service Record as LCDR HUGHES flight log was inadvertently sent to his next of kin.

11. Summary of Flight Experience:

a. Total years flying experience: 12 years Active Duty
b. Total pilot time: 2708
c. Total pilot time in helos: 604
d. Total time in jets: 25
E. Total time in type: 214.7

12. Summary of Pilot Time last 3 months:

During last	Total time	Night	Instrument
90 days	92.1	54.5	12.0
60 days	77.0	49.9	7.5
30 days	30.2	7.4	2.0
24 hours	0.6	0.6	0.0

ENCLOSURE (25)

13. SH3A(HSS-2) Training Experience:

LCDR HUGHES completed initial RAG training in HS-1 Key West, Florida on 1 December,1961 with approximately 25 hours flight time and one week of NAMTD schooling in the SH3A(HSS-2). He was designated HAPC and Instructor pilot on 1 December 1961. He was designated Squadron Standardisation Officer in June 1962.HHe had completed the Squadron training in Survival Equipment, Survival Readiness, Land Survival, Sea Survival, and Search and Rescue.

14. Record of Previous Accidents: None

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV 3750.6D.

Resume' of Duty Assignments and Flight Experience of LTJG (b) USNR, Copilot of SH-3A (HSS-2) BUNO 149004.

1. Name: (b) (6)
2. Station: USS ESSEX (CVS-9)
3. Unit: Helicopter Anti-Submarine Squadron NINE
4. Age: (b)
5. Date entered Navy: 31 January 1958
6. Date deignated Naval Aviator: 2 March 1960
7. Qualifications: SH3A (HSS-2), HAPC 24 August 1962
8. Type Instrument Card: Standard, Expiration 7 July 1963
9. Summary of Experience as a Naval Aviator:

Date		Duty Station	Duty
6-58	3-60	NAVBATRACOM, Pensacola, Florida	Student
3-60	Present	HS-9, NAS, Quonset Point, R.I.	Ass't Flight
			Flight
			Air France
			HAPC

10. Summary of flight time by type:

Type	Hours
T-34	39.1
T-28	99.9
SNB	68.7
HTL-6	30.4
HUP-2	27.8
HSS-1	655.2
TF-1	6.2
S2F	19.8
HSS-1N	10.5
HSS-2	98.3

11. Summary of Flight Experience:

a. Total years flying experience: 4 years Active Duty
b. Total pilot time: 1055.9
c. Total pilot time in helos: 822.2
d. Total time in type: 98.3

12. Summary of Pilot Time last 3 months:

During last	Total time	Night	Instrument
90 days	58.9	3.5	4.6
60 days	52.8	3.5	3.6
30 days	24.5	0.4	0.0
24 hours	0.1	0.1	0.0

13. HSS-2 Training Experience:

LTJG (b) completed the SH3A (HSS-2) Squadron training syllabus on 17 July 1962 involving approximately 35 hours of flight time.

14. Record of Previous Accidents: None attributable to pilot error.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

26

SUNRISE : 0554 HELICOPTER ANTI-SUBMARINE SQUADRON NINE FLIGHT SCHEDULE THURSDAY 18 OCTOBER 1962 SUNSET: 1735

CDO: LT. (b) (6) PRI-FLY OBSERVER: (1315-1730) LT (b) (6)
LT (1730-2130) LT
(2130-0030) LT

SDO: LTJG (b) (6)
LTJG

FDO: LTJG (b) (6)
LTJG

EVENT/MISSION	LAUNCH/RECOVER	FREQ	PILOT/CO-PILOT	CREW	ORDNANCE	A/C	A/D	A/A	FLT TIME
SAR/STEP Y	0554/1000	13/ENC	(b) (6)	(b) (6)	4 SHORT & 2 LONG				
COND TWO	1000/1330	"			" "				
"	1530/1735	"		BLYTHE	" "				
TESTS	AM/AM	13/ENC			" "	53			
"	" "	"			" "	51			
1A/PLANE GUARD	1330/1530	13/ENT		(b) (6)	" "				
"	" "	"			" "				
1B/TESTS	1330/1530	15/ENG			" "				
"	" "	"			" "				
"	" "	"			" "				
2A/NOTE 4	1800/2200	14/ENC			" "				
"	" "	"			" "				
"	" "	"			" "				
"	" "	"			" "				
3A/CARQUALS	2200/0030	13/ENT			" "				
"	" "	"			" "				
"	" "	"			" "				
"	" "	"	HUGHES/(b) (6)		" "				

NOTES: 1 BRIEF TIME ONE (1) HOUR PRIOR TO LAUNCH.
2 IN THE EVENT OF UHF FAILURE DANKNOTE IS GUARDING ASW CHANNEL (3205 VCS)

3 THE FOLLOWING PILOTS BRIEF AND STANDBY AS INDIVIDUAL SWITCH PILOTS FOR EVENT 3A: (b) (6)
(b) (6)

VER

27

4. INDIVIDUAL NIGHT DIPPING AND CNAL 2 QUAL.

5. GROUND TRAINING FOR ALL OFFICERS IMMEDIATELY AFTER 0900 AIR GROUP OFFICERS MEETING. ALSO IF FLIGHT SCHEDULE IS CANCELED THERE WILL BE ALL OFFICERS GROUND TRAINING AT 1330.

6. KNOW YOUR AIRCRAFT - AND ALL ITS SYSTEMS. THE LIFE YOU SAVE MAY BE YOUR OWN.

7. THE FOLLOWING CREWMAN BRING THIER POOPY SUITS, POOPY SUIT LINER, MEE JACKETS, AND PR2 LIFE RAFT TO THE PARA LOFT FOR CHECKS:

(b) (6) [redacted]

SUBMITTED

(b) (6) [redacted]

FLIGHT

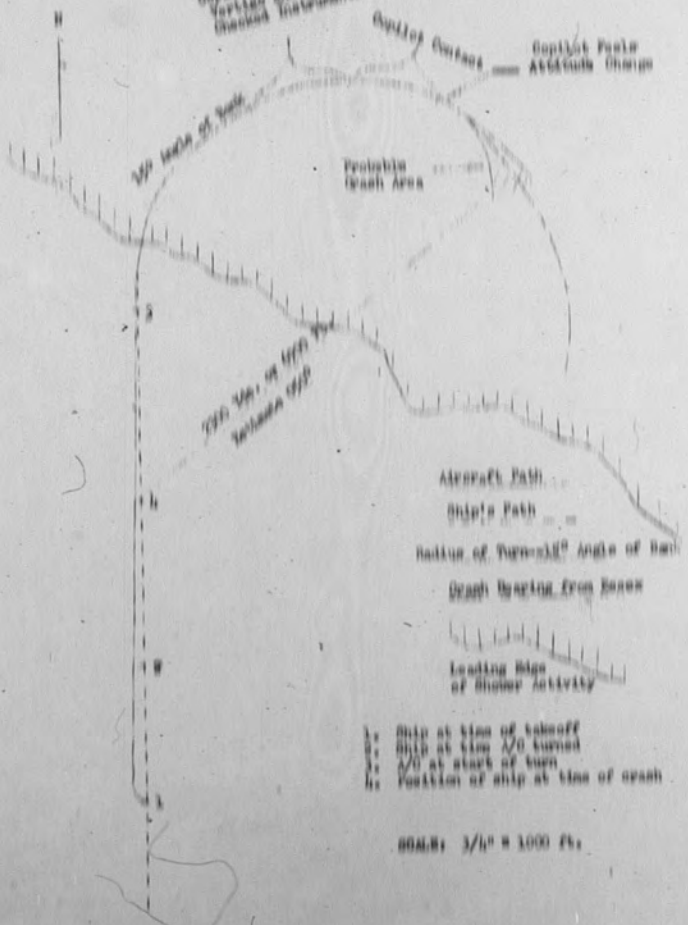
APPROVED

(b) (6) [redacted]

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAVINST 3750.6D

ENCLOSURE (27)

Diagram of Flight Path

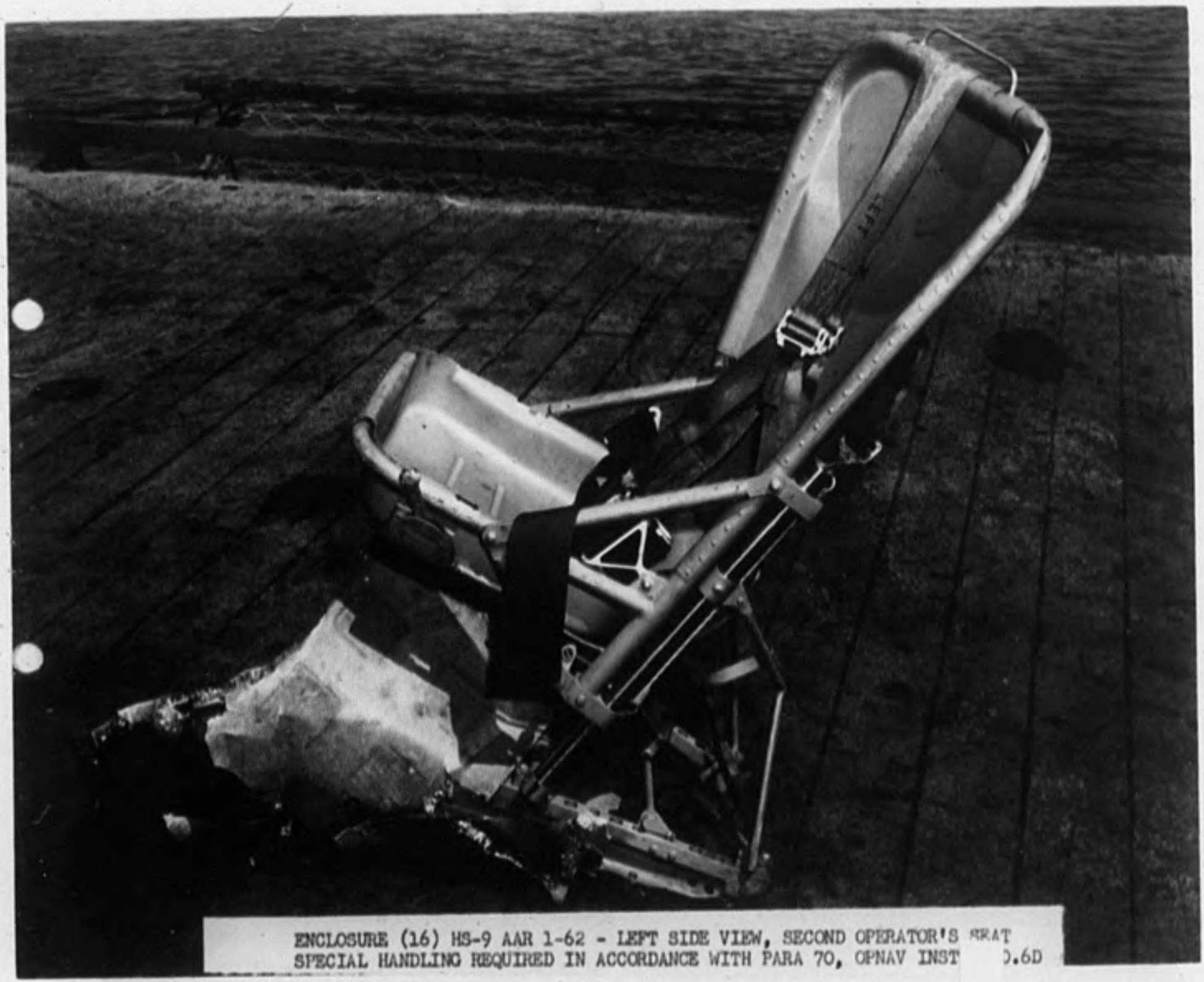


SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6B

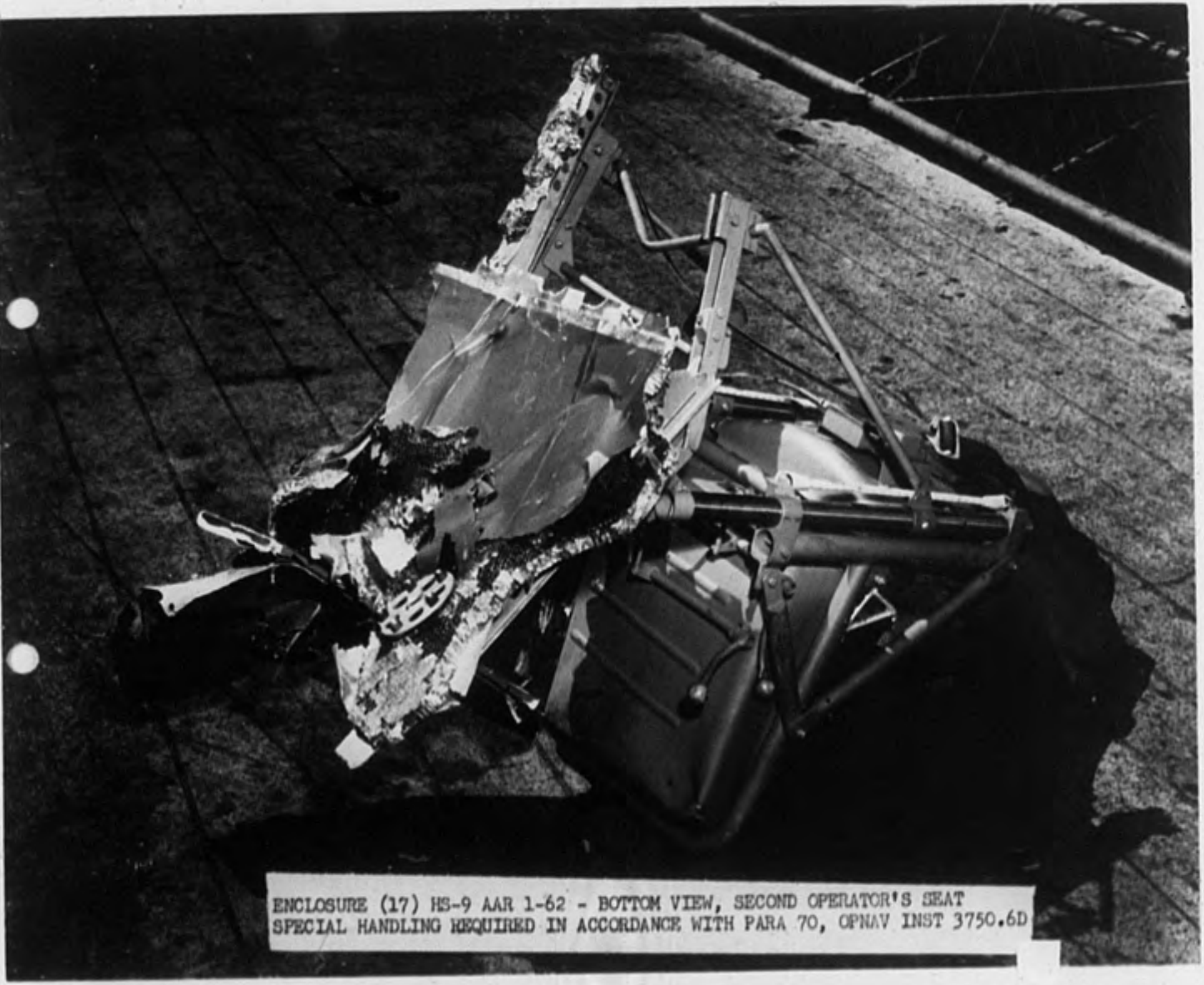
ENCLOSURE (2)

ENCLOSURE (14) HS-9 AAR 1-62 - DEBRIS RECOVERED FROM SCENE OF ACCIDENT
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV [illegible] 750.6D

ENCLOSURE (15) HS-9 AAR 1-62 - DAMAGE TO FORWARD CABIN DECKING
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

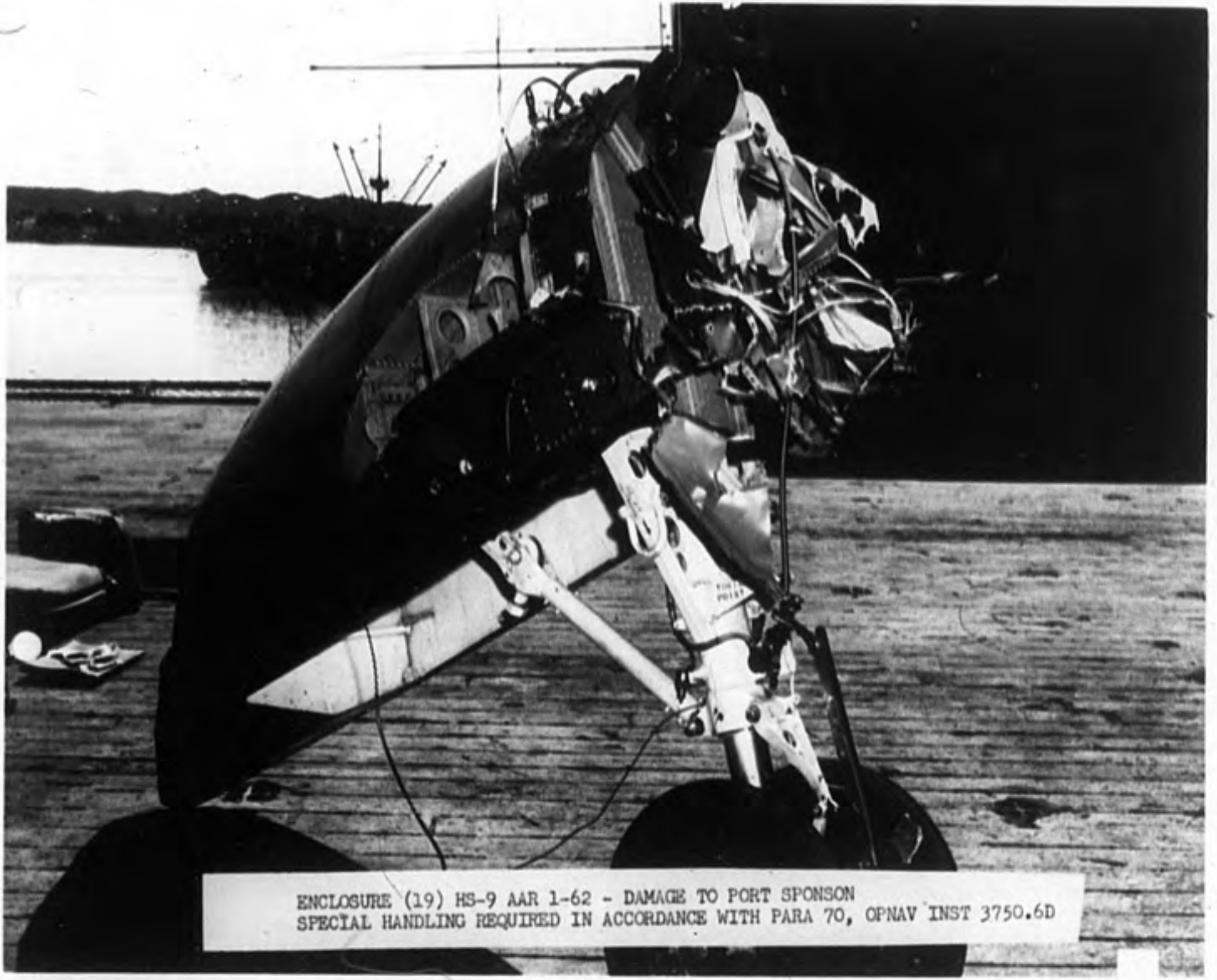


ENCLOSURE (16) HS-9 AAR 1-62 - LEFT SIDE VIEW, SECOND OPERATOR'S SEAT
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 5.6D



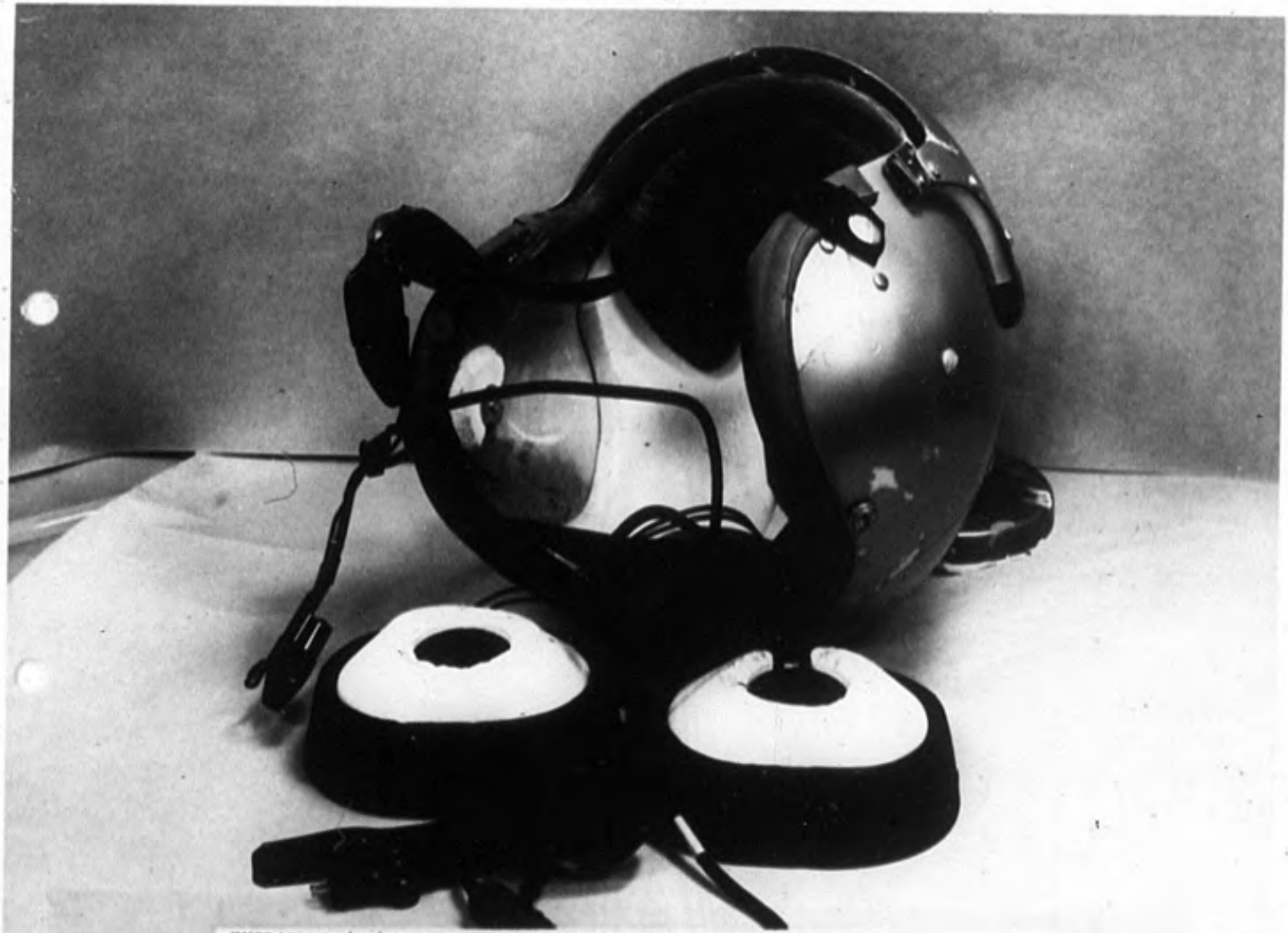
ENCLOSURE (17) HS-9 AAR 1-62 - BOTTOM VIEW, SECOND OPERATOR'S SEAT
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (18) HS-9 AAR 1-62 - DAMAGE TO STARBOARD SPONSON
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

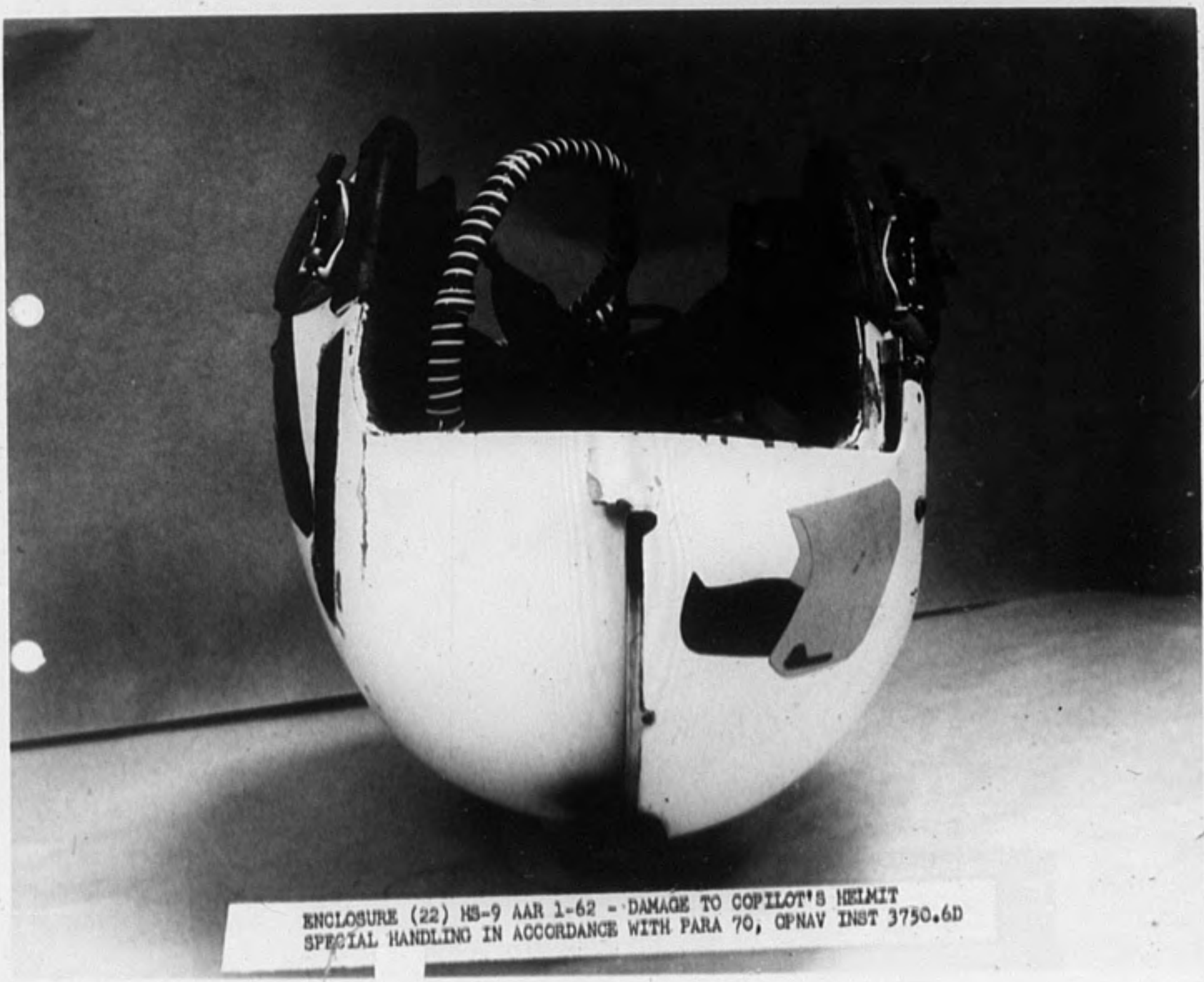


ENCLOSURE (19) HS-9 AAR 1-62 - DAMAGE TO PORT SPONSON
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (20) HS-9 AAR 1-62 - CONDITION OF COPILOT'S MAE WEST
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D



ENCLOSURE (21) HS-9 AAR 1-62 - DAMAGE TO PILOT'S HELMET
SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D



ENCLOSURE (22) HS-9 AAR 1-62 - DAMAGE TO COPILOT'S HELMIT
SPECIAL HANDLING IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

44: perhaps with editing this could be used in Approach?

(b) (6)

U. S. S. MANLEY (DD-940)
Care of Fleet Post Office
New York, New York

43/5 46 SW

(b) (6)

DD940
01/HHS:fa
3000
Ser 787

DEC 7 1962

From: Commanding Officer, USS MANLEY (DD940)
To: Commander, U.S. Naval Aviation Safety Center, U.S. Naval Air Station, Norfolk 11, Virginia

Subj: Rescue of LTJG (b) effected 19 October 1962; information concerning

Ref: (a) Helicopter Anti-Submarine Squadron Nine Memorandum 01:CIC:ks of 4 NOV 62

1. The following information is submitted as requested by reference (a).

a. On the night of 19 October 1962, MANLEY was in a two ship, bent line screen, ahead of ESSEX, with MANLEY on station on her starboard bow. The ships were in a driving, zero visibility, tropical rain storm when word was received that an aircraft had crashed. Using information generated by its CIC, based on a bearing and range given by the carrier at the time of the crash, MANLEY proceeded to the crash area. Visibility began to lift in a small area, and two successive flares were sighted. Shortly afterward, LTJG (b) was sighted in the water and he was heard blowing a whistle. He was brought aboard by motor whale boat.

2. No one on board MANLEY witnessed the crash.

3. Recommendations relative to destroyer rescue operations:

a. If the crash occurs close aboard the carrier she should either stop completely or clear the area expeditiously to allow destroyer complete freedom of maneuver. ESSEX movements did not at anytime hamper MANLEY and this comment is made only as a reminder that from the destroyer standpoint the carrier represents a possible mental hazard until her movements are known.

b. Plane guard destroyers should be kept informed as to aircraft remaining aloft. In this case, all S2F aircraft had returned aboard and it appeared that flight operations had ceased for the night. MANLEY's plane crash detail had been secured. This information may be available on land/launch in which case MANLEY possibly should have known that one helicopter remained aloft.

c. Flares and whistles are valuable aids in locating personnel in the water. LTJG (b) used these aids most effectively. He stated that he was also preparing to fire tracers from his gun, but dropped it as he took it from his holster. The use of pistol lanyards may be indicated.

L. I. SMITH, Jr.

Copy to:
HUS-9
COMDESRON FOUR
COMCRUDESLANT

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT - PAGE 1

OPNAV FORM 3750-6 (Rev. 1-58) See OPNAVINST. 3750.6C for Instructions - SPECIAL HANDLING REQUIRED

OPNAV REPORT SYMBOL

SECTION A - IDENTIFICATION

1. FROM (Name and mailing address of activity)
HELASRON NINE, USS ESSEX (CVS-9), FPO, NEW YORK, NEW YORK

2. DOS NUMBER
1-62

3. (Officer) DATE
1 Nov 1962

4. (Authority) DATE
1 Nov 1962

5. TYPE OF MISHAP
X ACCIDENT [ ] GROUND ACCIDENT [ ] INCIDENT

6. TIME AND ZONE
2359R

7. DATE
18 OCT 62

8. PLACE
60 miles south of Guantanamo Bay, Cuba lat 19°34.1N lon 75°22.1W

9. MODEL A/C HSS-2 SH-3A

10. BUNO
149004

11. NO. OF OCCUPANTS
3

12. TYPE ACCPT.
B-7

13. DAMAGE CODE
A

14. UNIT OPERATING A/C
HELASRON NINE

15. INDIVIDUALS INVOLVED - USE ADDITIONAL SHEETS IF REQUIRED. NAME (last, first and middle initials)	16. UNIT TO WHICH ATTACHED	17. RANK/RATE	18. FLIGHT/SERV. NO. DESIGNATOR	19. BILLET	20. BRANCH OF SERVICE	21. INJURY CODE	22. DISPOSITION
IN CONTROL OF A/C							
a. HUGHES, James R.	HS-9	LCDR	(b) (6)	Pilot	USN	L	Z
b. (b) (6)	HS-9	LTJG		CO-pilot	USN	C	X
c. BLYTHE, George A.	HS-9	ATN3	(b) (6)	Sonar Operator	USN	L	Z
d.							
e.							

23. CLASSIFICATION OF ITEMS 15-22 WHEN NECESSARY

300225

24. MODEL - OTHER A/C IF INVOLVED	25. BUNO	26. NO. OF OCCUPANTS	27. UNIT OPERATING A/C	28. DAMAGE CODE	29. REPORT NO.

30. DETAILED NARRATIVE ACCOUNT OF ACCIDENT (Use additional 8 1/2 x 11 plain sheets if required)

The helicopter involved in this accident, "52", had been launched earlier that night with LCDR HUGHES as pilot, LTJG (b) (6) as co-pilot, and BLYTHE as crewman. After LTJG (b) (6) had completed his three carquals they landed on the deck to switch pilots.

With LTJG (b) as co-pilot, the aircraft was launched, proceeding upwind and crossing the bow from port to starboard. It continued upwind, behind No. 61, which had launched moments earlier. No. 52 then entered a rainstorm, and commenced a starboard turn. It continued in this turn, gradually descending, but apparently under control. It continued to descend, until it struck the water, apparently bounced up, flipped or turned around, and struck the water again. About twenty to thirty minutes later, a flare was seen off the starboard beam, and "61" flew over the site, and then was returned to the ship. Shortly after this, a second flare was seen, and the plane guard destroyer moved in. We heard shortly that Mr. (b) had been recovered. No one else was found. The survivor's narrative is attached. Pertinent points in this statement as regards the cause of this accident are underlined.

SECTION B - MEDICAL OFFICER'S QUESTIONNAIRE

YES	NO	DID THE FLIGHT SURGEON: (If "NO" state reason in space below.)	
	X	1. VISIT THE SCENE OF THE MISHAP?	Accident at sea.
X		a. PARTICIPATE FULLY IN THE FIELD INVESTIGATION?	
X		b. PARTICIPATE FULLY IN THE DELIBERATIONS OF THE A/C ACCIDENT BOARD?	

GIVE APPROXIMATE NUMBER OF HOURS SPENT BY THE FLIGHT SURGEON:	a. IN FIELD INVESTIGATION	b. IN BOARD DELIBERATIONS	c. IN PREPARATION OF THIS REPORT
	5	16	20

REPORT PREPARATION CHECK LIST

[X] ALL PARTS OF FORM COMPLETED [X] SURVIVORS' NARRATIVES [X] PHOTOS [X] CONCLUSIONS AND RECOMMENDATIONS [X] REQUIRED COPIES FURNISHED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1958-471138

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT—Page 2

OPNAV FORM 3750-8A (Rev. 8-58) OPNAV REPORT 3750-7

SECTION C—PHYSIOLOGICAL, HUMAN ENGINEERING, DESIGN, SOCIO-PSYCHOLOGICAL, AND TRAINING FACTORS WHICH CONTRIBUTED IN SOME DEGREE TO THIS A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT

NAME OF INDIVIDUAL (Last, first, middle) | MODEL A/C

HUGHES, James Robert | SH3-A

Check E-Established, S-Suspected, or P-Present for each factor selected. Additional 8X10½ plain sheets will be used for the supporting account of items checked below. Identify each statement with the factor and section identification (e.g., C1, C2, etc.). Attach all sheets pertaining to these factors to this form upon completion.

E	S	P	✓ FACTORS
			PHYSIOLOGICAL:
			1. Physically incapacitated in flight
			2. "G" forces
			3. Environmental stress - External
			4. - Internal
			5. Dysbarism/explosive decompression
			6. Diet
	X		7. Fatigue
			8. Hypoxia
			9. Related illness
	X		10. Vertigo/Disorientation/Illusions
			11. Hyperventilation
			12. Drugs
			13. Physical state
			14. OTHER:
			HUMAN ENGINEERING AND DESIGN:
			15. Personal equipment
			16. Displays and/or controls
			17. Work arrangement
			18. Working environment
			19. Habit interference
			20. OTHER:
			SOCIO-PSYCHOLOGICAL: (Emotional stress from non-duty source)
			21. Pregnancy
			23. Illness or death
			23. Arguments
			24. Elated/Depressed state
			25. Personal habits - Drinking
			26. - Sex
			27. - Gambling
			28. - Debts

E	S	P	✓ FACTORS
			SOCIO-PSYCHOLOGICAL: (Emotional stress from duty source)
			29. Expeditings/Delays
		X	30. Weather
			31. Mechanical Problems
			32. Social and working relationships
			33. Personal comfort
			34. Regulations
			35. Facilities
			36. Navigation
			37. Duty assignment
		X	38. Personality traits
			NON-STRESS FACTORS:
			39. Faulty attention
	X		40. Poor judgement
			41. Forgetfulness
			42. OTHER SOCIO-PSYCHOLOGICAL FACTORS
			TRAINING FACTORS:
			43. Physiological training
			44. Emergency Procedures training
			45. Survival and rescue training
			46. Refresher training
			47. Transition training
			48. OTHER:

SECTION D — AIR CREW DATA (fill in where applicable)

1. Flight time past 30 days	26.7	7. Total time in model	269.5 hours
2. Flight time last 24 hours	0.6	8. Number of days grounded last month, give reason	None
3. Number of flights in last 24 hours	1		
4. Time at controls this flight	2-3 minutes	9. Number of and dates of previous accidents	None
5. Number of hours duty last 24 hours	6		
6. Total flight time	2708.9		

SECTION E — CONTRIBUTING FACTORS AND THEIR ANALYSIS (As condensed from Part I, Sect. D and Part VIII of the ARI)

NOTE: Fill in this section only on that set of forms prepared for FIRST individual listed in Section A, i.e. 15(a). Attach additional sheets as necessary.

See attached sheet.

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C-7. Fatigue is a factor which is considered here, because its role can not be determined.

The pilot had commented on the difficulty he had in sleeping in the warm weather, and that his room was too hot to sleep comfortably. The amount of sleep he obtained the previous night is not known, but it was apparently a fitful night. It is known, however, that he took two naps during the day prior to this flight, each of at least one hour duration, and they may have been up to two hours each. The last of these was shortly before his hop.

The beneficial effect of such a nap is well known, and the pilot acted alert and refreshed before and during the first part of his flight. For this reason, fatigue is probably not a factor of significance in this accident.

C-10. For a while after this accident occurred, pilot disorientation was felt to be the major cause of it. [redacted]
(b) (5)

In trying to evaluate the role of vertigo in this case, an interesting point about this aircraft has been brought to light. This has to do with flicker vertigo.

Flicker vertigo is usually associated with a light beam striking the subjects eyes at a frequency range from four to twenty per second. It is sometimes seen in single engine reciprocation aircraft set at low RPM taxiing into a light source. It manifests itself by a state of hypnosis, which may lead to unconsciousness or convulsions.

ADDENDUM MCR 1-62 HUGHES, James Robert

C-10 (Cont'd)

The rotating beacons on the SH-3A helicopter have a single red light source which is reflected off a double-faced mirror, which rotates at forty-five to fifty turns per minute. This produces a red light beam visible from any point about the aircraft at a rate of ninety to one hundred per minute. In a test of these beacons, conducted in the hangar bay, it was found that the speed of rotation can fluctuate, thus allowing them to get out of phase with one another. During this time, there was a red light reflected off the hangar deck bulkheads at a frequency of one hundred eighty to two hundred per minute. One wall was approximately thirty feet from the plane and parallel to its long axis, and the other twenty feet ahead of the nose. This frequency of reflection was easily seen from the pilot's seat with the head turned only slightly to the right, as well as straight ahead.

The rate of two hundred per minute is below the four per second given as the low range for flicker vertigo, so the ability of this frequency to produce this type of disorientation is open to debate. We do know that a rain-shower such as described in this accident provides good reflective surface for this light.

C-30. Weather is mentioned because it was present, and it was bad. The carquals were delayed shortly after this plane lifted off, because it was raining. The weather forced full IFR flying on the pilot, (b) (5)

(b) (5)

C-38. The role of personality traits can not be completely determined in this accident. (b) (5), (b) (6) [redacted]

The pilot was an experienced aviator, and fully competent to fly this aircraft in any weather. Some of the younger pilots in the squadron had a type of hero worship for him. He was known as a confident pilot, (b) (5) [redacted] (b) (5) [redacted] He made things look easy. He was known to take short cuts, but did not compromise on safety. He had been known to fly with his inertia reel unlocked, but it is not known whether it was locked or not on this flight.

(b) (5) [redacted]

PART VII - THE INVESTIGATION (CONTINUED)

MALFUNCTION		CORRECTIVE ACTION
5-7-62	SONAR ALT READS 30 FT WHEN RAD ALT READS 40 FT	CHECKS 4.0 UNDER SIMULATED DIP CONDITIONS

This aircraft flew 9 flights for a total of 19.4 hours before next Radar Altimeter malfunction.

5-14-62	RAD ALT INTERMITTENT DURING FLIGHT	CHECKS 4.0 ON DECK

This aircraft flew 6 flights for a total of 14.4 hours before the next Radar Altimeter malfunction.

5-21-62	RADAR ALTIMETER CYCLES CONTINUOUSLY	CHECKED ON BENCH, TIGHTENED CABLES, CHECKS 4.0 IN AIRCRAFT

This aircraft flew 5 flights for a total of 10 hours before going into first Calendar Major Inspection 6-11-62. Inspection was completed on 7-30-62 and a test flight of 2.8 hours was flown. Following this, 5 flights with a total of 12.5 hours were flown before the next Radar Altimeter malfunction.

8-4-62	RADAR ALTIMETER DOES NOT WORK	REPLACED ALT FUSE CALIBRATED

This aircraft flew 26 flights for a total of 61.7 hours without any further malfunction of the Radar Altimeter prior to the accident.

The helicopter had a full fuel load on initial take off with an estimated gross weight of 16,830 pounds. An estimated fuel consumption of 500 pounds per engine hour would put the weight of the helicopter at the time of the accident at approximately 16,230 pounds.

PART VIII - THE ANALYSIS

A. Personnel Factors

With the exception of the Flight Surgeon the Board feels that the cause of this accident was pilot disorientation. Although unable to determine concrete facts on which to base this conclusion, certain facts point in this direction. The co-pilot did not see the pilot after they had passed the 90 degree position of the up-wind turn and does not know whether the pilot remained completely on instruments. [redacted]

(b) (5)

[redacted]

(b) (5)

This was the point at which LTJG [redacted] (b) got an uncomfortable "seat of the pants" feeling and noted a change in aircraft attitude. The pilot's reaction came too late or was not adequate to cope with the situation. The aircraft contacted the water, broke up and sank.

According to the "Handbook of Aerodynamics for Naval Aviators", NavWeps 00-80T-80, a 15 degree angle of bank, airspeed 90 to 100 knots will result in a turn radius of approximately 2800 feet, as illustrated in enclosure (28). This supports the Board's contention that the angle of bank was not increased to hasten landing aboard the ship, with the possible exception of the last few seconds before the crash.

PART VIII THE ANALYSIS (CONTINUED)

It is not definitely known how much of a factor fatigue was in this accident. The pilot slept approximately eight hours the day of the crash and seemed to LTJG (b) (6) to be alert. He may or may not have been fatigued, however, it is noted that he was asleep when the word to "man aircraft" was passed. The Board is unanimous in its conclusion that a four wait in the Ready Room for the word to "man aircraft" is fatiguing.

(b) (5) [redacted] An adequate scan is essential to safe flight at altitude in the vicinity of 200'.

The co-pilot did not develop an adequate crosscheck of cockpit instruments. In the upwind turn the aircraft was IFR. Being able to see nothing outside and having experienced vertigo he should have turned his attention more frequently to the instruments.

LTJG (b) was not scheduled to fly originally but was later notified (approximately one hour prior to flight) that he was to switch seats with LTJG (b) (6) and night carrier qualify. While waiting in Flight Deck Control for the signal to switch pilots, he commented that he was "tired". (b) (5) [redacted]

(b) (5) [redacted]

Weather encountered in the upwind turn may have contributed to the accident in that the forward rotating beacon reflecting off precipitation is distracting.

B. Supervisory Factors

It is felt by the Board that (b) (5) [redacted] laying of the launch indefini [redacted] Twenty-five minutes is not considered sufficient time to pre-flight and turn-up an SH-3A for night operations. No other supervisory factors are considered relevant in this accident.

C. Material Failures or Malfunctions

Material failures or malfunctions are not considered to be a cause factor in this accident by the majority of the Board. A minority statement is made under PART IX, COMMENTS, by the Flight Surgeon. The investigation revealed a prior history of six (6) RADALT discrepancies over a period of six (6) months and in each case the equipment was properly repaired and written off by maintenance. No RADALT discrepancies appeared for two and one-half months including an intermediate inspection, prior to the accident. The aircraft was in an "up" status when accepted by the pilot and the RADALT was operating properly on takeoff (see enclosure (2)).

Rapid unwinding of the RADALT through 80' was noted by the co-pilot. It is believed this resulted from a rate of descent of the aircraft toward the water coupled with a rolling of the aircraft toward straight and level flight.

Although not positively known to have contributed to the crewman's death it is believed that the sonar dome and associated equipment shifted forward upon impact of the aircraft with the water, breaking the crew seats from their moorings and inflicting severe damage. (enclosures (16) and (17)).

D. Facilities

The Board feels the action taken by the ship in holding the flight was correct but initiated too late.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

PART VIII - THE ANALYSIS (CONTINUED)

E. Survival Factors

All survival equipment involved in the accident worked properly with the exception of the pilot's and co-pilot's APH-5 Protective Helmets which came off on impact in spite of the fact that the chin and nape straps were tight (see enclosures (21) and (22)). In addition to his helmet the co-pilot lost his gloves, revolver and flashlight. Although the equipment pockets on the co-pilots Mae West had been partially torn away (enclosure (20)), he was still able to locate and utilize all of the survival equipment needed.

LTJG (b) saw a sponson floating inverted, swam to it, and climbed into the well to await rescue. He began blowing his whistle, which, according to the Commanding Officer of the MANLEY, was of great value in locating him. On approach of the rescue craft LTJG (b) abandoned his make-shift raft and swam toward the boat. This action is considered improper in that he was bleeding and in shark infested waters. He was lifted physically from the water, into the ship's whaleboat, placed in a "stokes" stretcher, and taken to sickbay aboard the MANLEY.

PART IX - COMMENTS

A. The majority of the Board feels the primary of the accident is personnel factor. It is believed the pilot maintained both a contact and an instrument flight scan, and gradually descended in a right turn until collision was made with the water. Radar Altimeter failure cannot be completely discounted, but if a proper scan had been utilized, any malfunction of this component would have been noticed.

As a contributing cause factor the co-pilot failed to integrate a scan of the instrument panel with his attempt to remain contact.

B. The Flight Surgeon does not concur with the majority of the Board as to the primary cause of this accident. His statement follows:

The most likely cause of this accident is a malfunction of the Radio Altimeter in the aircraft.

In reconstructing this case, we know from the survivor's narrative and from eyewitness reports that the plane lifted off the deck and progressed in its flight under control. The plane flew into instrument weather, and the co-pilot states that when he looked at the pilot, he was on the instruments. Flying this aircraft under such conditions requires a scan pattern to cover the Vertical Gyro Indicator, RADALT, and airspeed indicator. This flight had no abnormal characteristics or sudden or erratic attitude changes involved, so the pilot must have been satisfied that he was flying it correctly, according to his instruments.

(b) (5) [redacted]

At some point just before impact, with the plane 10 to 20 feet above the water, the Radar Altimeter needle must have begun unwinding toward zero quite fast. The pilot noticed it at 180 feet, and it was down to 140 feet by the time he reacted. His attempt to correct the situation was the sudden attitude change the co-pilot experienced. The co-pilot turned to the RADALT, saw it rapidly passing through 80 feet toward zero, and then they hit the water.

A significant point which corroborates this explanation is that the co-pilot described the speed with which the Radar Altimeter needle went through 80 feet as "unbelievably fast". The witness description of the flight path show no

SECTION F - SAFETY, PERSONAL, AND SURVIVAL EQUIPMENT

Prepare a narrative account of damaged or failed items. Identify each item discussed (e.g., F1, F2, etc.)

NAME OF INDIVIDUAL (Last, first, middle): KUGHES, James Robert

MODEL A/C: SH-3A

GENERAL DESCRIPTION OF EQUIPMENT	AVAILABLE YES	AVAILABLE NO	SPECIFIC MODEL OR TYPE	UTILIZED YES	UTILIZED NO	FAILED YES	FAILED NO	DESCRIPTION OF DAMAGE TO EQUIPMENT
1. Shoulder harness	X		V-Type	X			(1)	
2. Lap belt	X		Pilot Safety	X			(1)	#1. See C-38 for amplification.
3. Inertia reel	X		MA-1	X			(1)	
4. G Suit								
5. Pressure suit-full or partial								
6. Exposure suit								
7. Flight suit (Other than above)	X		Summer Flight	X			(1)	
8. Helmet	X		AFH-5	X			(1)	Neither the pilot nor his gear, save his hard hat was recovered, so its function is indeterminate.
9. Goggles/Eyeshield	X		Visor		X		(1)	
10. Shoes	X		Summer Flight	X			(1)	
11. Gloves	X		Summer Flight	X			(1)	
12. Life vest	X		MK II		X			
13. Life raft								
14. OTHER:								
15. SIGNAL DEVICE - Flare (Night)	X		MK 13		X			
16. - Flare (Day)	X		MK 13		X			
17. - Dye marker								
18. - Radio								
19. - Flashlight	X		Signal		X			
20. - Mirror	X		Survival Signal		X			
21. OTHER:								
22. SURVIVAL GEAR - Knife	X		5" sheath		X			
23. - First aid kit	X		Aeronautic		X			
24. - Shelter								
25. - Food								
26. OTHER:								
27. RESCUE - Vehicle								
28. - Sling, Net, Stretcher								
29. OTHER:								

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE

OXYGEN EQUIPMENT

1. MASK - MODEL OR TYPE
2. MODIFICATIONS, IF ANY
3. REGULATOR - MODEL OR TYPE
4. MODIFICATIONS, IF ANY
5. PREFLIGHTED BY USER? ☐ YES ☐ NO
6. IF NO, WHY NOT
7. LIST DISCREPANCIES NOTED BY PREFLIGHT CHECK
8. OXYGEN SUPPLY: PRIOR TO FLIGHT _____ LITERS (Liquid) _____ P.S.I. (Gas); TIME OF ACCIDENT _____ LITERS (Liquid) _____ P.S.I. (Gas)
9. WAS OXYGEN IN USE AT TIME OF ACCDT. ☐ YES ☐ NO
10. IF YES, WAS SELECTOR SETTING ☐ 100% ☐ NORMAL
11. WAS ALL OXYGEN EQUIPMENT NECESSARY FOR THIS FLIGHT AVAILABLE? IF NO, LIST ITEMS AND REASON WHY. ☐ YES ☐ NO
12. WAS OXYGEN MASK REMOVED AT ANY TIME IN FLIGHT? IF YES, GIVE DURATION AND REASON. ☐ NO ☐ YES

RELEASE DEVICES

13. TYPE CHUTE RELEASE DEVICE
14. TYPE HARNESS RELEASE DEVICE
15. WHEN WERE RELEASE DEVICES ACTIVATED?
16. WERE DIFFICULTIES ENCOUNTERED WITH RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO
17. WERE DIFFICULTIES ENCOUNTERED AFTER ACTIVATING RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO
18. WAS LIFE VEST INFLATED PRIOR TO ACTIVATING RELEASE DEVICES? IF YES, WHAT DIFFICULTIES DID THIS PRODUCE? ☐ YES ☐ NO

(Continued on OPNAV FORM 3110-4C)

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ADDENDUM MCR 1-62 HUGHES, James Robert

F-8. The hardhat from the pilot was recovered following the accident. The damage it sustained is shown in the photograph.

The damage of greatest interest is that delivered to the center of the visor cover. It appears to have started at the bottom, working up and becoming greater until it ended in the deep portion. The visor, as shown, has a hole punched in it, corresponding to the upper end of that groove. An attempt to identify the object, or objects, in the cockpit that produced this damage was inconclusive.

The microphone was twisted out and spun down about its pivot point. The blow which did this struck the end of the boom behind the pivot point coming from the side and below, and continued on to strike the helmet in the lower ear piece region. This area is not shown on the picture.

(b) (5) the chin strap, (b) (5) (b) (5) is in the tightened position, showing that the helmet was properly placed on his head and pulled up tight. It was still gotten off by some method, but when this occured is speculative.

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SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE *(Continued)*

NAME OF INDIVIDUAL *(Last, first, middle)*: HUGHES, James Robert

MODEL A/C: SH3-A

RESTRAINT HARNESS

19. INTEGRATED HARNESS SYSTEM, MODEL/TYPE: N/A
20. INTEGRATED? ☐ FULL ☐ PARTIAL
21. MODIFICATIONS, IF ANY STATE REASON
22. DID INTEGRATED HARNESS FIT PROPERLY? IF NO, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR ☐ NO ☐ YES
23. INTEGRATED HARNESS FITTING WAS CONDUCTED BY: ☐ WEARER ☐ FLIGHT SURGEON ☐ PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER
24. IF SHOULDER HARNESS WAS USED, WAS IT: ☐ LOCKED ☐ UNLOCKED ☐ TIGHT ☐ SLACK ☐ OTHER CONDITION

HELMET

25. TYPE HELMET: APH-5
26. LIST PRESCRIBED MODIFICATIONS: Nape strap, crystal microphone (2)
27. OTHER MODIFICATIONS AND REASON FOR THEM
28. DID HELMET FIT PROPERLY? IF NO, GIVE REASON [X] YES ☐ NO
29. HELMET FITTING WAS CONDUCTED BY: ☐ WEARER ☐ FLIGHT SURGEON [A] PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER

PARACHUTE

30. TYPE CHUTE
31. LAST PACKING DATE
32. MODEL/TYPE BAILOUT OXYGEN
33. AUTOMATIC RIPCORD, IF INSTALLED *(Model and type)* ☐ NONE
34. DID AUTOMATIC RIPCORD FAIL? IF YES, WHY? ☐ NO
35. WAS RIPCORD ACTIVATION ☐ MANUAL ☐ AUTOMATIC?
36. IF MANUALLY ACTIVATED STATE REASON AND ANY DIFFICULTIES ENCOUNTERED
37. DID CHUTE OPEN IMMEDIATELY? IF NO, GIVE REASON ☐ YES ☐ NO
38. ALTITUDE THAT CHUTE OPENED: FEET
39. OPENING SHOCK WAS: ☐ SLIGHT ☐ MODERATE ☐ SEVERE
40. BODY ATTITUDE AT OPENING
41. CONDITION OF CHUTE AFTER OPENING
42. CHUTE OSCILLATION PRESENT: ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ SEVERE
43. IF OSCILLATION WAS PRESENT, HOW WAS IT STOPPED?
44. WEATHER CONDITIONS DURING DESCENT *(List in sequence)*
45. TOPOGRAPHY OF LANDING SITE
46. WAS BAILOUT OXYGEN CONNECTED? ☐ BEFORE EXIT ☐ AFTER EXIT ☐ NO ☐ N.A.
47. WAS BAILOUT OXYGEN USED? IF NOT, WHY ☐ YES ☐ NO
48. WHEN WAS IT ACTIVATED? ☐ BEFORE EXIT ☐ AFTER EXIT
49. GIVE DIFFICULTIES ENCOUNTERED WITH BAILOUT OXYGEN AND THEIR CAUSE, IF ANY
50. WAS CHUTE HARNESS ☐ TIGHT ☐ SNUG ☐ LOOSE
51. WAS A SITTING POSITION IN SLING OBTAINED DURING DESCENT? IF NOT, WHY? ☐ NO ☐ YES ☐ NOT ATTEMPTED
52. SEAT CUSHION IF PROVIDED *(Model/Type)* ☐ NONE
53. WAS PARAPAK LANYARD CONNECTED TO LIFE VEST D RING? IF NOT, WHY? ☐ NO ☐ YES
54. LIST TYPE OF PARACHUTE TRAINING COMPLETED BY THIS INDIVIDUAL ☐ NONE
55. IF ATTEMPT WAS MADE TO RELEASE PARAPAK DURING DESCENT, WAS RELEASE ACTIVATED SUCCESSFULLY? ☐ YES ☐ NO
56. IF NO, GIVE REASON

OTHER

57. IF G SUIT, EXPOSURE SUIT, FULL OR PARTIAL PRESSURE SUIT WAS WORN, DID IT FIT PROPERLY? IF NOT, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR ☐ YES ☐ NO
58. WAS G SUIT EQUIPPED WITH A SPRING-LOADED DISCONNECT ADAPTER? IF NO, GIVE REASON ☐ YES ☐ NO
59. LIST ALL ITEMS OF NON-STANDARD CLOTHING OR SURVIVAL EQUIPMENT UTILIZED
60. WAS ANY ITEM OF EQUIPMENT LOST? IF YES STATE ITEM, WHEN LOST, AND REASON FOR LOSS. ☐ NO ☐ YES — Unknown (/)
61. WAS ANY ITEM OF EQUIPMENT DISCARDED? IF YES, STATE ITEM, WHEN DISCARDED, AND REASON FOR DISCARD. ☐ NO ☐ YES — Unknown (/)

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SECTION H - EMERGENCY EXIT FROM A/C AND SURVIVAL FACTORS

NAME OF INDIVIDUAL (Last, first, middle)

HUGHES, James Robert

MODEL A/C

UH-1A

S	E	S-SUSPECTED, E-ESTABLISHED	REMARKS
		1. EJECTION - Attempted	
		2. - Accomplished	N/A
		3. - Through canopy	

YES	NO	EJECTION DIFFICULTIES ENCOUNTERED	IF YES, EXPLAIN DIFFICULTIES
		4. - Prior to	
		5. - During	
		6. - Subsequent to	
		7. Give type and model of seat used	
		8. BAILOUT - Attempted	
		- Accomplished	

9. ALTITUDE AT TIME OF EXIT (Feet) ABOVE SEA LEVEL: Unknown ABOVE TOPOGRAPHY:

10. ATTITUDE OR MANEUVER OF A/C AT EXIT OR IMPACT: Right wing and nose, down

11. AIRSPEED: 120 Knots K

12. COLLISION OF A/C WITH: [ ] GROUND [X] WATER [ ] OTHER

13. CONTROLLED? [ ] YES [ ] NO [X] UNKNOWN

14. POWER: [X] ON [ ] OFF

15. WHEELS: [ ] UP [X] DOWN

16. FLAPS: [ ] FULL [ ] UP [ ] PARTIAL N/A

17. CANOPY POSITION AT EXIT OR IMPACT: [X] OPEN [ ] CLOSED [ ] JETTISONED

18. SEA STATE: 1

19. AIR TEMP.: 77 °F

20. WATER TEMP.: 86 °F

21. A/C FLOATED: 0 SEC.

22. TIME IN WATER: Unknown

23. TIME IN RAFT: N/A

BAIL OUT OR COLLISION WITH WATER OR GROUND

24. EXIT USED: Unknown

25. IS THIS THE RECOMMENDED EXIT? IF NO STATE REASON FOR CHOICE. [ ] YES [ ] NO

26. DIFFICULTIES WITH THIS EXIT WERE: [ ] IN REACHING [ ] IN OPENING [ ] IN EXITING

27. STATE NATURE OF DIFFICULTY

28. BODY POSITION DURING EXIT: Unknown

29. LIST OTHER FACTORS/NOT INDICATED ABOVE WHICH AFFECTED EXIT FROM A/C

Unknown, The pilot was not found

SURVIVAL FACTORS: Check factors below which are appropriate for this accident. Prepare a detailed narrative account of the factors checked below and attach to this form. Identify each item discussed by item number (e.g., H30, H31, etc.)

COMMUNICATIONS:		MAINTAINING BODY TEMPERATURE:	
	30. Communicated position prior to mishap		50. Items used as shelter
	31. Witnesses at scene		51. Items used as clothing
	32. Electronic signal devices		52. Fire
	33. Visual signal devices		53. OTHER:
	34. Auditory signal devices	ENVIRONMENTAL HAZARDS:	
	35. OTHER:		54. Exposure to natural forces
TRAVEL:			55. Exposure to dangerous animals and plants
	36. LAND		56. Unfriendly native population
	37. WATER		57. OTHER:
SHELTER:		MORALE:	
	38. Life raft		58. Isolation
	39. Parachute		59. Psychological shock
	40. A/C structure		60. Lack of motivation to survive
	41. Natural shelter		61. Boredom
	42. Man-made shelter		62. Rationing, activities, and group coordination
	43. OTHER:		63. OTHER:
WATER SOURCE:		FOOD SOURCE:	
	44. Desalter kit, seawater or solar still		64. Prepared survival rations
	45. Rain, dew, snow, ice, etc.		65. Animals/plants
	46. Processed beverages		66. OTHER:
	47. Canteen, thermos, water breaker, etc.	SURVIVAL TRAINING RECEIVED PRIOR TO MISHAP:	
	48. Streams, ponds, wells, etc.		67.
	49. OTHER:		

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SECTION I - PATHOLOGICAL FACTORS (Use A to denote ANTE MORTEM; P for POST MORTEM, when known and applicable.)

1. NAME OF INDIVIDUAL (Last, first, middle): HUGHES, James Robert
MODEL A/C: SH3-A

2. AGE: 32
3. HEIGHT: 71 INCHES
4. WEIGHT: 175
5. LOCATION AND DIRECTION FACING AT TIME OF ACCIDENT: Pilots seat, facing forward
6. INJURY CODE: Z

7. UNCONSCIOUSNESS: ☐ SHORT DURATION LITTLE SIGNIFICANCE ☐ OTHER (give time)
8. INTERNAL INJURIES (Non-fatal cases)

HEAD INJURIES
9. CEREBRAL CONCUSSION: ☐ MINOR ☐ SERIOUS ☐ CRITICAL ☐ FATAL
10. FACIAL INJURIES (N.O.S.)
11. INTRA-ORAL INJURIES
12. MINOR EYE INJURIES: ☐ RIGHT ☐ LEFT
13. MAJOR EYE INJURIES: ☐ RIGHT ☐ LEFT

14. TYPE OF FRACTURE

TYPE OF FRACTURE	SKULL CRAN.	SKULL FACIAL	VERTEBRAE (Specify No.) CERV.	THOR.	LUMBAR	SACRAL	COCCYX	SHOULDER GIRDLE	RIBS	PELVIS	UPPER ARM R	UPPER ARM L	LOWER ARM R	LOWER ARM L	HAND R	HAND L	UPPER LEG R	UPPER LEG L	LOWER LEG R	LOWER LEG L	FOOT R	FOOT L
SIMPLE																						
COMPOUND																						
COMMINUTED																						

DISLOCATION: JAW / SHOULDER / ELBOW / WRIST / HAND / HIP / KNEE / ANKLE / FOOT

15. AMPUTATIONS/AVULSIONS (State Parts)
16. LIST PRE-EXISTING PHYSICAL DEFECTS PRESENT AT TIME OF POST CRASH EXAMINATION

17. SOFT TISSUE INJURIES

		LACERATIONS MILD	MODERATE	SEVERE	CONTUSION/SPRAIN/STRAIN MILD	MODERATE	SEVERE	ABRASIONS MILD	MODERATE	SEVERE
HEAD (N.O.S.)	VENTRAL									
	DORSAL									
NECK										
THORAX	VENTRAL									
	DORSAL									
ABDOMEN	VENTRAL									
	DORSAL									
EXTREMITIES	UPPER									
	LOWER									

18. ☐ DROWNED
19. ☐ ASPHYXIATED
20. SHOCK: ☐ MILD ☐ MODERATE ☐ SEVERE
21. EXPOSURE: ☐ MILD ☐ MODERATE ☐ SEVERE

22. ☐ BURNS ☐ FROST BITE

	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
DEGREE									
AREA	HEAD(ventral	Dorsal)	TRUNK(ventral	Dorsal)	ARMS	LEGS			

23. EXTENT OF CARBONIZATION: ☐ NONE ☐ COMPLETE
ARE TISSUE SPECIMENS OBTAINABLE? ☐ YES ☐ NO

NOTE: Attach a detailed narrative account of injuries, cause, structures causing injury, magnitudes of force, and include whether ANTE- OR POST-MORTEM if determined. It is necessary to give as clear a picture of injury cause and sequence as possible.

24. ADMITTED TO SICK LIST? IF YES, GIVE DIAGNOSIS ☐ YES ☐ NO
25. DIAGNOSIS NO. (NAVMED P-1294)
26. ESTIMATED STAY ON SICK LIST: DAYS
27. GROUNDED? IF YES GIVE REASON ☐ YES ☐ NO
28. ESTIMATED DURATION: DAYS

29. PRIMARY CAUSE OF DEATH (Use Basic Diagnostic Nomenclature, NAVMED P-1294): Lost at sea NO. 8601
30. SECONDARY CAUSE OF DEATH: NO.

31. AUTOPSY PERFORMED? ☐ YES ☐ NO
32. PROTOCOL ☐ ATTACHED ☐ WILL BE FORWARDED
33. AUTOPSY CONDUCTED BY ☐ PATHOLOGIST ☐ FLIGHT SURGEON
IF FLIGHT SURGEON DOES AUTOPSY USE "AUTOPSY GUIDE FOR A/C ACCIDENT FATALITIES", AFIP, 1957.

34.

SPECIMEN		TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD:	1			TISSUE: (CNS)		
	2			- MUSCLE		
	3			- VISCERA		
URINE				OTHER:		
G-I CONTENTS						

35. IF ULTRAVIOLET LIGHT OR OTHER SPECIALIZED INVESTIGATIVE PROCEDURES WERE USED AT THE MISHAP SITE OR AUTOPSY, LIST THEM IN THIS SPACE. FOR EACH ENTRY IN THIS SPACE A NARRATIVE ACCOUNT OF THEIR RESULTS AND INTERPRETATION WILL BE ATTACHED.

★ U. S. GOVERNMENT PRINTING OFFICE: 1959—498198

8-18878

MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT—Page 2

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SECTION C—PHYSIOLOGICAL, HUMAN ENGINEERING, DESIGN, SOCIO-PSYCHOLOGICAL, AND TRAINING FACTORS WHICH CONTRIBUTED IN SOME DEGREE TO THIS A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT

NAME OF INDIVIDUAL (Last, First, middle) [redacted] (b) (6)

MODEL A/C SH3-A

Check E-Established, S-Suspected, or P-Present for each factor selected. Additional 8X10½ plain sheets will be used for the supporting account of items checked below. Identify each statement with the factor and section identification (e.g., C1, C2, etc.). Attach all sheets pertaining to these factors to this form upon completion.

E	S	P	✓ FACTORS
			PHYSIOLOGICAL:
			1. Physically incapacitated in flight
			2. "G" forces
			3. Environmental stress - External
			4. - Internal
			5. Dysbarism/explosive decompression
			6. Diet
		X	7. Fatigue
			8. Hypoxia
			9. Related illness
		X	10. Vertigo/Disorientation/Illusions
			11. Hyperventilation
			12. Drugs
			13. Physical state
			14. OTHER:
			HUMAN ENGINEERING AND DESIGN:
			15. Personal equipment
			16. Displays and/or controls
			17. Work arrangement
			18. Working environment
			19. Habit interference
			20. OTHER:
			SOCIO-PSYCHOLOGICAL: (Emotional stress from non-duty sources)
			21. Pregnancy
			22. Illness or death
			23. Arguments
			24. Elated/Depressed state
			25. Personal habits - Drinking
			26. - Sex
			27. - Gambling
			28. - Debts

E	S	P	✓ FACTORS
			SOCIO-PSYCHOLOGICAL: (Emotional stress from duty sources)
			29. Expeditings/Delays
			30. Weather
			31. Mechanical Problems
			32. Social and working relationships
			33. Personal comfort
			34. Regulations
			35. Facilities
			36. Navigation
			37. Duty assignment
			38. Personality traits
			NON-STRESS FACTORS:
			39. Faulty attention
			40. Poor judgement
			41. Forgetfulness
			42. OTHER SOCIO-PSYCHOLOGICAL FACTORS
			TRAINING FACTORS:
			43. Physiological training
			44. Emergency Procedures training
			45. Survival and rescue training
			46. Refresher training
			47. Transition training
			48. OTHER:

SECTION D — AIR CREW DATA (fill in where applicable)

1. Flight time past 30 days	21.3	7. Total time in model	98.3 hours
2. Flight time last 24 hours	8	8. Number of days grounded last month, give reason	None
3. Number of flights in last 24 hours	2		
4. Time at controls this flight	5	9. Number of and dates of previous accidents	Ground accident Kiel, Germany October 1961
5. Number of hours duty last 24 hours	6		
6. Total flight time	1055.9		

SECTION E — CONTRIBUTING FACTORS AND THEIR ANALYSIS (As condensed from Part I, Sec. D and Part VIII of the ARE)

NOTE: Fill in this section only on that set of forms prepared for FIRST individual listed in Section A, Le. 15(a). Attach additional sheets as necessary.

☆U. S. GOVERNMENT PRINTING OFFICE: 1960—570560

ADDENDUM MOR 1-62 (b) (6)

C-7 Although it played no part in this accident, as he had no control of the aircraft during its flight, the Co-Pilot admitted to being fatigued prior to the hop. He blames this on the fact that he had no adequate notice that he was to fly, but rather was called approximately one hour before he was due to fly. He had slept seven hours the previous night, but had been up almost 16 hours when he was told he was to fly. He states that he would have taken an afternoon nap had he known of the upcoming flight.

C-10 This, too, played no direct part in the accident, but the Co-Pilot did admit experiencing vertigo shortly after lift off. He states that he felt they were flying straight and level, but upon referring to the V. G. I., he found the plane to be in a 15 degree right turn. It is interesting to note that in his statement, he refers to the feeling in the "seat of his pants", and it was this same "seat of the pants" sensation that alerted him to the change in the plane's attitude shortly before impact.

SECTION F - SAFETY, PERSONAL, AND SURVIVAL EQUIPMENT

Prepare a narrative account of damaged or failed items. Identify each item discussed (e.g., F1, F2, etc.)

NAME OF INDIVIDUAL (Last, first, middle): [redacted]

MODEL A/C: SH3-A

GENERAL DESCRIPTION OF EQUIPMENT	AVAILABLE YES	AVAILABLE NO	SPECIFIC MODEL OR TYPE	UTILIZED YES	UTILIZED NO	FAILED YES	FAILED NO
1. Shoulder harness	X		V-Type	X			X
2. Lap belt	X		Pilot safety	X			X
3. Inertia reel	X		MA-1	X			X
4. G-Suit							
5. Pressure suit-full or partial							
6. Exposure suit							
7. Flight suit (Other than above)	X		Summer aviation	X		(3)	X
8. Helmet	X		APH-5	X			X (3)
9. Goggles/Eyeshield	X		Visor	(1)			(3)
10. Shoes	X		Summer flight	X			X
11. Gloves	X		Summer flight	X			X
12. Life vest	X		MK II	X			X (3)
13. Life raft	X		MK IV		X		
14. OTHER:							
15. SIGNAL DEVICE - Flare (Night)	X		MK 13 Mod-0	X			X
16. - Flare (Day)	X		MK 13 Mod-0		X		X
17. - Dye marker	X				X		X
18. - Radio							
19. - Flashlight	X		Signal	X			~~X~~ (4)
20. - Mirror	X		Survival signal		X		~~X~~
21. OTHER: Whistle	X			X			X
22. SURVIVAL GEAR - Knife	~~X~~	(2)	5" sheath		~~X~~		X
23. - First aid kit	X		Aeronautic		X		X
24. - Shelter							
25. - Food							
26. OTHER:							
27. RESCUE - Vehicle	(1)		Destroyer/whaleb.	(1)			(2)
28. - Sling, Net, Stretcher	X		Stokes	X			X
29. OTHER:							

DESCRIPTION OF DAMAGE TO EQUIPMENT

#15. Both worked well burned for 10-15 seconds each.

#19. Worked inter mittently, but was seen by the Helicopter.

#22. The pilot did not have it with him.

#23. The first aid kits were in the helicopter and not recovered until the following day.

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE

OXYGEN EQUIPMENT

1. MASK - MODEL OR TYPE
2. MODIFICATIONS, IF ANY
3. REGULATOR - MODEL OR TYPE
4. MODIFICATIONS, IF ANY
5. PREFLIGHTED BY USER? ☐ YES ☐ NO
6. IF NO, WHY NOT
7. LIST DISCREPANCIES NOTED BY PREFLIGHT CHECK
8. OXYGEN SUPPLY: PRIOR TO FLIGHT ____ LITERS (Liquid) ____ P.S.I. (Gas); TIME OF ACCIDENT ____ LITERS (Liquid) ____ P.S.I. (Gas)
9. WAS OXYGEN IN USE AT TIME OF ACCDT. ☐ YES ☐ NO
10. IF YES, WAS SELECTOR SETTING ☐ 100% ☐ NORMAL
11. WAS ALL OXYGEN EQUIPMENT NECESSARY FOR THIS FLIGHT AVAILABLE? IF NO, LIST ITEMS AND REASON WHY. ☐ YES ☐ NO
12. WAS OXYGEN MASK REMOVED AT ANY TIME IN FLIGHT? IF YES, GIVE DURATION AND REASON. ☐ NO ☐ YES

RELEASE DEVICES

13. TYPE CHUTE RELEASE DEVICE
14. TYPE HARNESS RELEASE DEVICE
15. WHEN WERE RELEASE DEVICES ACTIVATED?
16. WERE DIFFICULTIES ENCOUNTERED WITH RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO
17. WERE DIFFICULTIES ENCOUNTERED AFTER ACTIVATING RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO
18. WAS LIFE VEST INFLATED PRIOR TO ACTIVATING RELEASE DEVICES? IF YES, WHAT DIFFICULTIES DID THIS PRODUCE? ☐ YES ☐ NO

(Continued on OPNAV FORM 3750-8C)

ADDENDUM MOR 1-62 (b) (6)

F-7. The attached photograph shows the extensive tears that his flight suit sustained. There are numerous other rips which do not show up well. The only significant thing abnormal is that the sleeve zippers are open, although those on the legs are zipped all the way down.

F-8. The helmet of the co-pilot was recovered, and the damage is shown in the photo. It is limited to the loss of the visor and the left half of the visor shield. The role of the helmet will be discussed in the narrative account of his injuries.

F-12. The life jacket was torn during exit, but the damage was limited to ripping the upper pockets loose at the top. They were still attached at the bottom, and all the contents were present and workable. The life jacket held air on post-mishap check.

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NAME OF INDIVIDUAL (Last, first, middle) (b) (6) [redacted]

SECTION C - DETAILED EQUIPMENT QUESTIONNAIRE (Continued)

RESTRAINT HARNESS

19. INTEGRATED HARNESS SYSTEM, MODEL/TYPE	20. INTEGRATED? ☐ FULL ☐ PARTIAL	21. MODIFICATIONS, IF ANY STATE REASON	MODEL A/C SH3-A

22. DID INTEGRATED HARNESS FIT PROPERLY? IF NO, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR
☐ NO ☐ YES

23. INTEGRATED HARNESS FITTING WAS CONDUCTED BY:
☐ WEARER ☐ FLIGHT SURGEON ☐ PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER

24. IF SHOULDER HARNESS WAS USED, WAS IT:
☐ LOCKED ☐ UNLOCKED ☐ TIGHT ☐ SLACK ☐ OTHER CONDITION

HELMET

25. TYPE HELMET: APH-5

26. LIST PRESCRIBED MODIFICATIONS: Hardmann fittings, nape strap. (1)

27. OTHER MODIFICATIONS AND REASON FOR THEM

28. DID HELMET FIT PROPERLY? IF NO, GIVE REASON
☒ YES ☐ NO

29. HELMET FITTING WAS CONDUCTED BY:
☐ WEARER ☐ FLIGHT SURGEON ☒ PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER

PARACHUTE

30. TYPE CHUTE	31. LAST PACKING DATE	32. MODEL/TYPE BAILOUT OXYGEN	33. AUTOMATIC RIPCORD, IF INSTALLED (Model and type) ☐ NONE

34. DID AUTOMATIC RIPCORD FAIL? IF YES, WHY?
☐ NO

35. IF MANUALLY ACTIVATED STATE REASON AND ANY DIFFICULTIES ENCOUNTERED.

35. WAS RIPCORD ACTIVATION ☐ MANUAL ☐ AUTOMATIC?

37. DID CHUTE OPEN IMMEDIATELY? IF NO, GIVE REASON
☐ YES ☐ NO

38. OPENING SHOCK WAS: ☐ SLIGHT ☐ MODERATE ☐ SEVERE	40. BODY ATTITUDE AT OPENING	41. CONDITION OF CHUTE AFTER OPENING	39. ALTITUDE THAT CHUTE OPENED FEET

42. CHUTE OSCILLATION PRESENT: ☐ NONE ☐ SLIGHT ☐ MODERATE ☐ SEVERE

43. IF OSCILLATION WAS PRESENT, HOW WAS IT STOPPED?

44. WEATHER CONDITIONS DURING DESCENT (List in sequence)

45. TOPOGRAPHY OF LANDING SITE

46. WAS BAILOUT OXYGEN CONNECTED? ☐ BEFORE EXIT ☐ AFTER EXIT ☐ NO ☐ N.A.

47. WAS BAILOUT OXYGEN USED? IF NOT, WHY ☐ YES ☐ NO

48. WHEN WAS IT ACTIVATED? ☐ BEFORE EXIT ☐ AFTER EXIT

49. GIVE DIFFICULTIES ENCOUNTERED WITH BAILOUT OXYGEN AND THEIR CAUSE, IF ANY

50. WAS CHUTE HARNESS ☐ TIGHT ☐ SNUG ☐ LOOSE

51. WAS A SITTING POSITION IN SLING OBTAINED DURING DESCENT? IF NOT, WHY? ☐ NO ☐ YES ☐ NOT ATTEMPTED

52. SEAT CUSHION IF PROVIDED (Model/Type) ☐ NONE

53. WAS PARASLIP LANYARD CONNECTED TO LIFE VEST D RING? IF NOT, WHY? ☐ NO ☐ YES

54. LIST TYPE OF PARACHUTE TRAINING COMPLETED BY THIS INDIVIDUAL ☐ NONE

55. IF ATTEMPT WAS MADE TO RELEASE PARASLIP DURING DESCENT, WAS RELEASE ACTIVATED SUCCESSFULLY? ☐ YES ☐ NO

56. IF NO, GIVE REASON

OTHER

57. IF G SUIT, EXPOSURE SUIT, FULL OR PARTIAL PRESSURE SUIT WAS WORN, DID IT FIT PROPERLY? IF NOT, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR
☐ YES ☐ NO

58. WAS G SUIT EQUIPPED WITH A SPRING-LOADED DISCONNECT ADAPTER? IF NO, GIVE REASON
☐ YES ☐ NO

59. LIST ALL ITEMS OF NON-STANDARD CLOTHING OR SURVIVAL EQUIPMENT UTILIZED

60. WAS ANY ITEM OF EQUIPMENT LOST? IF YES STATE ITEM, WHEN LOST, AND REASON FOR LOSS.
☐ NO ☒ YES
APH-5, Flashlight, .38 caliber revolver, flight gloves-sometime during exit from airplane. (1)

61. WAS ANY ITEM OF EQUIPMENT DISCARDED? IF YES, STATE ITEM, WHEN DISCARDED, AND REASON FOR DISCARD.
☒ NO ☐ YES

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SECTION H - EMERGENCY EXIT FROM A/C AND SURVIVAL FACTORS

NAME OF INDIVIDUAL (Last, first, middle): (b) (6)

MODEL A/C: SH3-A

S	E	S-SUSPECTED, E-ESTABLISHED	REMARKS
		1. EJECTION - Attempted	
		2. - Accomplished	
		3. - Through canopy	

YES	NO	EJECTION DIFFICULTIES ENCOUNTERED	IF YES, EXPLAIN DIFFICULTIES
		4. - Prior to	
		5. - During	
		6. - Subsequent to	
		7. Give type and model of seat used	
		8. BAILOUT - Attempted	
		- Accomplished	

9. ALTITUDE AT TIME OF EXIT (Feet): MSL [X] SEA LEVEL 10-15 Ft ABOVE TOPOGRAPHY (1)

10. ATTITUDE OR MANEUVER OF A/C AT EXIT OR IMPACT: Right wing and nose, down (2)

11. AIRSPEED: 120 Knots (3)

12. DIVISION OF A/C WITH: [ ] GROUND [X] WATER

13. CONTROLLED? [ ] YES [ ] NO [X] UNKNOWN

14. POWER: [X] ON [ ] OFF

15. WHEELS: [ ] UP [X] DOWN

16. FLAPS: [ ] FULL [N/A] UP [ ] PARTIAL

17. CANOPY POSITION AT EXIT OR IMPACT: [X] OPEN [ ] CLOSED [ ] JETTISONED (4)

18. SEA STATE

19. AIR TEMP. 77 °F

20. WATER TEMP. 86 °F

21. A/C FLOATED 0 SEC.

22. TIME IN WATER 60 (5)

23. TIME IN RAFT 10' (6)

BAIL OUT OR COLLISION WITH WATER OR GROUND

24. EXIT USED: Unknown

25. IS THIS THE RECOMMENDED EXIT IF NO STATE REASON FOR CHOICE. [ ] YES [ ] NO

26. DIFFICULTIES WITH THIS EXIT WERE: [ ] IN REACHING [ ] IN OPENING [X] IN EXITING

27. STATE NATURE OF DIFFICULTY: Exit tight and required much effort to get out.

28. BODY POSITION DURING EXIT: Head first, otherwise unknown.

29. LIST OTHER FACTORS NOT INDICATED ABOVE WHICH AFFECTED EXIT FROM A/C

Aircraft underwater, and co-Pilot unsure of his position in the aircraft, and unsure which exit he used to leave the plane. (7)

SURVIVAL FACTORS: Check factors below which are appropriate for this accident. Prepare a detailed narrative account of the factors checked below and attach to this form. Identify each item discussed by item number (e.g., 1630, R3i, etc.)

COMMUNICATIONS:		**MAINTAINING BODY TEMPERATURE:**	
	30. Communicated position prior to mishap		50. Items used as shelter
X	31. Witnesses at scene		51. Items used as clothing
	32. Electronic signal devices		52. Fire
X	33. Visual signal devices		53. OTHER:
X	34. Auditory signal devices	**ENVIRONMENTAL HAZARDS:**	
	35. OTHER:		54. Exposure to natural forces
TRAVEL:			55. Exposure to dangerous animals and plants
	36. LAND		56. Unfriendly native population
	37. WATER		57. OTHER:
SHELTER:		**MORALE:**	
	38. Life raft		58. Isolation
	39. Parachute		59. Psychological shock
X	40. A/C structure		60. Lack of motivation to survive
	41. Natural shelter		61. Boredom
	42. Man-made shelter		62. Rationing, activities, and group coordination
	43. OTHER:		63. OTHER:
WATER SOURCE:		**FOOD SOURCE:**	
	44. Desalter kit, seawater or solar still		64. Prepared survival rations
	45. Rain, dew, snow, ice, etc.		65. Animals/plants
	46. Processed beverages		66. OTHER:
	47. Canteen, thermos, water breaker, etc.	**SURVIVAL TRAINING RECEIVED PRIOR TO MISHAP:**	
	48. Streams, ponds, wells, etc.		67.
	49. OTHER:		

☆ U. S. GOVERNMENT PRINTING OFFICE : 1960-570863

ADDENDUM MOR 1-62 (b) (6) [redacted]

H-31. This accident was seen in its entirety by at least two people, who gave immediate warning, and who were able to describe the apparent path the plane followed prior to impact. Their vision was limited by night and rainy weather, but both stories coincide.

H-32. Although his light did not work perfectly, it was easily visible from the second helicopter when they approached and flew over him. It was rechecked upon its return from the rescuing destroyer, and found to work well.

H-33. The co-pilot had no difficulty in locating and using his night flares, even though the pockets holding them were torn loose at the top. The first flare was seen by many people on the carrier, as well as the two pilots in the other helicopter who flew over him. The second flare was also seen easily from the carrier, and from the destroyer, who was then nearing him. Both flares burned for ten to fifteen seconds.

H-34. This rescue again shows the value of the whistle. The destroyer captain told the co-pilot that he had originally sighted his position by the flare, but that after this burned out, he homed in on him by the whistle, which the co-pilot blew almost continuously after boarding the sponson. There was very little wind that night, which helped the destroyer crew to hear it.

ADDENDUM MOR 3-62 (b) (6) [redacted]

3-40. The pilot displayed good ingenuity in finding himself a type of raft. Shortly after surfacing, he noticed one of the aircraft's sponsons floating inverted nearby. He swam over to it, climbed into the wheel-well and leaned up against the gear, which was extended. The well was partly swash, but supported his weight without difficulty. [redacted]

(b) (5) [redacted]

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SECTION I - PATHOLOGICAL FACTORS (Use A to denote ANTE MORTEM; P for POST MORTEM, when known and applicable.)

1. NAME OF INDIVIDUAL (Last, first, middle): [redacted]
MODEL A/C: SH3-A

2. AGE: 25
3. HEIGHT / 4. WEIGHT: [redacted]
5. LOCATION AND DIRECTION FACING AT TIME OF ACCIDENT: Facing forward in Co-Pilots (left) seat
6. INJURY CODE: C

7. UNCONSCIOUSNESS: None — ☐ SHORT DURATION LITTLE SIGNIFICANCE ☐ OTHER (give time)
8. INTERNAL INJURIES (Non-fatal cases): None

HEAD INJURIES
9. CEREBRAL CONCUSSION: ☒ MINOR ☐ SERIOUS ☐ CRITICAL ☐ FATAL
10. FACIAL INJURIES (N.e.c.)
11. INTRA-ORAL INJURIES: None
12. MINOR EYE INJURIES: ☒ RIGHT ☐ LEFT
13. MAJOR EYE INJURIES: ☐ RIGHT ☐ LEFT

14. TYPE OF FRACTURE	SKULL CRAN.	SKULL FACIAL	VERTEBRAE CERV.	THOR.	LUMBAR	SACRAL	COCCYX	SHOULDER GIRDLE	RIBS	PELVIS	UPPER ARM R	UPPER ARM L	LOWER ARM R	LOWER ARM L	HAND R	HAND L	UPPER LEG R	UPPER LEG L	LOWER LEG R	LOWER LEG L	FOOT R	FOOT L
SIMPLE																						
COMPOUND																						
COMMINUTED																						

DISLOCATION: JAW / SHOULDER / ELBOW / WRIST / HAND / HIP / KNEE / ANKLE / FOOT

15. AMPUTATIONS/AVULSIONS (State Parts): None
16. LIST PRE-EXISTING PHYSICAL DEFECTS PRESENT AT TIME OF POST CRASH EXAMINATION: None

17. SOFT TISSUE INJURIES — LACERATIONS (MILD, MODERATE, SEVERE); CONTUSION/SPRAIN/STRAIN (MILD, MODERATE, SEVERE); ABRASIONS (MILD, MODERATE, SEVERE)
HEAD (n.e.c.) VENTRAL, DORSAL; NECK; THORAX VENTRAL, DORSAL; ABDOMEN VENTRAL, DORSAL; EXTREMITIES UPPER, LOWER
[redacted]

18. ☐ DROWNED
19. ☐ ASPHYXIATED
20. SHOCK / 21. EXPOSURE
[redacted]

[redacted]
DEGREE: 1ST 2ND 3RD | 1ST 2ND 3RD | 1ST 2ND 3RD
AREA: HEAD (vent. al / Dorsal) | TRUNK (ventral / Dorsal) | ARMS | LEGS
[redacted]

23. EXTENT OF CARBONIZATION: ☐ NONE ☐ COMPLETE
ARE TISSUE SPECIMENS OBTAINABLE: ☐ YES ☐ NO

NOTE: Attach a detailed narrative account of injuries, cause, structures causing injury, magnitude of force, and include whether ANTE- OR POST-MORTEM if determined. It is necessary to give as clear a picture of injury cause and sequence as possible.

24. ADMITTED TO SICK LIST? IF YES, GIVE DIAGNOSIS — 25. DIAGNOSIS NO. (NAVMED P-1294) — 26. ESTIMATED STAY ON SICK LIST
[redacted] DAYS

27. GROUNDED? IF YES GIVE REASON
[redacted]
28. ESTIMATED DURATION: [redacted] DAYS

29. PRIMARY CAUSE OF DEATH (Use Basic Diagnostic Nomenclature, NAVMED P-1294) NO.
30. SECONDARY CAUSE OF DEATH NO.

31. AUTOPSY PERFORMED? ☐ YES ☐ NO
32. PROTOCOL: ☐ ATTACHED ☐ WILL BE FORWARDED
33. AUTOPSY CONDUCTED BY: ☐ PATHOLOGIST ☐ FLIGHT SURGEON
IF FLIGHT SURGEON DOES AUTOPSY USE "AUTOPSY GUIDE FOR A/C ACCIDENT FATALITIES", NFIP, 1957.

34. SPECIMEN		TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD:	1			TISSUE: (BONE)		
	2			MUSCLE		
	3			VISCERA		
URINE				OTHER:		
G-I CONTENTS						

35. IF EXTRAVAGANT LIGHT OR OTHER SPECIALIZED INVESTIGATIVE PROCEDURES WERE USED AT THE MISHAP SITE OR AUTOPSY, LIST THEM IN THIS SPACE. FOR EACH ENTRY IN THIS SPACE A NARRATIVE ACCOUNT OF THEIR RESULTS AND INTERPRETATION WILL BE ATTACHED.

ADDENDUM MORL-62 (b) (6) [redacted]

NARRATIVE OF INJURIES RECEIVED

The major portion of this man's injuries were apparently sustained in his attempt to get free of the aircraft.

In reconstructing the chain of events, the first injury was incurred when the aircraft first struck the water. [redacted] (b) (6) [redacted] He was then thrown violently about in the cockpit, probably because his seat was torn free from the aircraft. It is not known whether he still had his helmet on at this time, as he does not know when it was lost. (b) (5) [redacted] (b) (5) [redacted] (b) (5), (b) (6) [redacted]

He remembers that after the second impact, that he felt water coming up fast, and that after taking a deep breath, he became submerged. He waited two seconds, released his lap belt, and reached to his left and found an opening. He began to climb out this way, but found himself restrained. It is assumed that [redacted] (b) (5), (b) (6) [redacted] Once surfaced, there were no further actions which could have produced significant injury, (b) (6) [redacted] (b) [redacted]

ADDENDUM MOR 1-62 (b) (6) [redacted]

NARRATIVE OF INJURIES RECEIVED (con't)

(b) (6) [redacted]

(b) (6) [redacted] His right flight shoe is completely intact, with no sign of damage. [redacted]

(b) (5) [redacted]

His flight suit bears mute testimony to the numerous sharp edges he passed through. The accompanying photographs do not adequately show the tattered condition it was in, and how many separate tears it had.

The total of his injuries is:

(b) (6) [redacted]

Treatment rendered:

(b) (6) [redacted]

(b) (6) [redacted]

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SECTION C—PHYSIOLOGICAL, HUMAN ENGINEERING, DESIGN, SOCIO-PSYCHOLOGICAL, AND TRAINING FACTORS WHICH CONTRIBUTED IN SOME DEGREE TO THIS A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT

NAME OF INDIVIDUAL (Last, first, middle): **BLYTHE, George Allison**

MODEL A/C: **8H 3A**

Check E-Established, S-Suspected, or P-Present for each factor selected. Additional 8X10½ plain sheets will be used for the supporting account of items checked below. Identify each statement with the factor and section identification (e.g., C1, C2, etc.). Attach all sheets pertaining to these factors to this form upon completion.

E	S	P	✓ FACTORS
			PHYSIOLOGICAL:
			1. Physically incapacitated in flight
			2. "G" forces
			3. Environmental stress - External
			4. - Internal
			5. Dysbarism/explosive decompression
			6. Diet
			7. Fatigue
			8. Hypoxia
			9. Related illness
			10. Vertigo/Disorientation/Illusions
			11. Hyperventilation
			12. Drugs
			13. Physical state
			14. OTHER:
			HUMAN ENGINEERING AND DESIGN:
			15. Personal equipment
			16. Displays and/or controls
			17. Work arrangement
			18. Working environment
			19. Habit interference
			20. OTHER:
			SOCIO-PSYCHOLOGICAL: (Emotional stress from non-duty sources)
			21. Pregnancy
			22. Illness or death
			23. Arguments
			24. Elated/Depressed state
			25. Personal habits - Drinking
			26. - Sex
			27. - Gambling
			28. - Debts

E	S	P	✓ FACTORS
			SOCIO-PSYCHOLOGICAL: (Emotional stress from duty sources)
			29. Expeditings/Delays
			30. Weather
			31. Mechanical Problems
			32. Social and working relationships
			33. Personal comfort
			34. Regulations
			35. Facilities
			36. Navigation
			37. Duty assignment
			38. Personality traits
			NON-STRESS FACTORS:
			39. Faulty attention
			40. Poor judgement
			41. Forgetfulness
			42. OTHER SOCIO-PSYCHOLOGICAL FACTORS
			TRAINING FACTORS:
			43. Physiological training
			44. Emergency Procedures training
			45. Survival and rescue training
			46. Refresher training
			47. Transition training
			48. OTHER:

SECTION D — AIR CREW DATA (fill in where applicable)

1. Flight time past 30 days	11.1
2. Flight time last 24 hours	0.6
3. Number of flights in last 24 hours	1
4. Time at controls this flight	0
5. Number of hours duty last 24 hours	10
6. Total flight time	30

7. Total time in model: 30

8. Number of days grounded last month, give reason: None

9. Number of and dates of previous accidents: None

SECTION E — CONTRIBUTING FACTORS AND THEIR ANALYSIS (As condensed from Part I, Sect. D and Part VIII of the ARR)

NOTE: Fill in this section only on that set of forms prepared for FIRST individual listed in Section A, i.e. 15(a). Attach additional sheets as necessary.

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MEDICAL OFFICER'S REPORT OF A/C ACCIDENT, INCIDENT, OR GROUND ACCIDENT – PAGE 3

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SECTION F - SAFETY, PERSONAL, AND SURVIVAL EQUIPMENT

Prepare a narrative account of damaged or failed items. Identify each item discussed (e.g., F1, F2, etc.)

NAME OF INDIVIDUAL (Last, first, middle)

BLYTHE, George Allison

MODEL A/C

SH3-A

GENERAL DESCRIPTION OF EQUIPMENT	AVAIL ABLE YES	AVAIL ABLE NO	SPECIFIC MODEL OR TYPE	UTILIZED YES	UTILIZED NO	FAILED YES	FAILED NO	DESCRIPTION OF DAMAGE TO EQUIPMENT
1. Shoulder harness	X		V-Type	X			(	
2. Lap belt	X		Pilot safety	X				
3. Inertia reel	X		MA-1	X				
4. G-Suit								
5. Pressure suit-full or partial								
6. Exposure suit								
7. Flight suit (Other than above)	X		Summer Flight	X				
8. Helmet	X		FPH-1	X				
9. Goggles/Eyeshield								
10. Shoes	X		Summer flight	X				
11. Gloves	X		Summer flight	X				
12. Life vest	X		MK II	X				
13. Life raft								
14. OTHER:								
15. SIGNAL DEVICE - Flare (Night)	X		MK 13		X			
16. - Flare (Day)	X		MK 13		X			
17. - Dye marker	X				(2)			
18. - Radio								
19. - Flashlight	X		Signal		X			
20. - Mirror	X		Signal		X			
21. OTHER:								
22. SURVIVAL GEAR - Knife	X		5" sheath		X			
23. - First aid kit	X		Aeronautic		X			
24. - Shelter								
25. - Food								
26. OTHER:								
27. RESCUE - Vehicle								
28. - Sling, Net, Stretcher								
29. OTHER:								

Neither this crewman nor his equipment was recovered, so its function can not be determined.

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE

OXYGEN EQUIPMENT

1. MASK - MODEL OR TYPE

2. MODIFICATIONS, IF ANY

3. REGULATOR - MODEL OR TYPE

4. MODIFICATIONS, IF ANY

5. PREFLIGHTED BY USER? ☐ YES ☐ NO

6. IF NO, WHY NOT

7. LIST DISCREPANCIES NOTED BY PREFLIGHT CHECK

8. OXYGEN SUPPLY: PRIOR TO FLIGHT ____ LITERS (Liquid) ____ P.S.I. (Gas) — TIME OF ACCIDENT ____ LITERS (Liquid) ____ P.S.I. (Gas)

9. WAS OXYGEN IN USE AT TIME OF ACCDT. ☐ YES ☐ NO

10. IF YES, WAS SELECTOR SETTING ☐ 100% ☐ NORMAL

11. WAS ALL OXYGEN EQUIPMENT NECESSARY FOR THIS FLIGHT AVAILABLE? IF NO, LIST ITEMS AND REASON WHY. ☐ YES ☐ NO

12. WAS OXYGEN HOSE REMOVED AT ANY TIME IN FLIGHT? IF YES, GIVE DURATION AND REASON. ☐ NO ☐ YES

RELEASE DEVICES

13. TYPE CHUTE RELEASE DEVICE

14. TYPE HARNESS RELEASE DEVICE

15. WHEN WERE RELEASE DEVICES ACTIVATED?

16. WERE DIFFICULTIES ENCOUNTERED WITH RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO

17. WERE DIFFICULTIES ENCOUNTERED AFTER ACTIVATING RELEASE DEVICES? IF YES, STATE DIFFICULTIES, WHEN ENCOUNTERED AND CAUSE. ☐ YES ☐ NO

18. WAS LIFE VEST INFLATED PRIOR TO ACTIVATING RELEASE DEVICES? IF YES, WHAT DIFFICULTIES DID THIS PRODUCE? ☐ YES ☐ NO

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(Continued on OPNAV FORM 3750-8C)

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OPNAV REPORT 3750-7

SECTION G - DETAILED EQUIPMENT QUESTIONNAIRE (Continued)

NAME OF INDIVIDUAL (Last, first, middle): BLYTHE, George Allison

MODEL A/C: SNB-A

RESTRAINT HARNESS

18. INTEGRATED HARNESS SYSTEM, MODEL/TYPE

19. INTEGRATED? ☐ FULL ☐ PARTIAL

21. MODIFICATIONS, IF ANY STATE REASON

22. DID INTEGRATED HARNESS FIT PROPERLY? IF NO, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR
☐ NO ☐ YES

23. INTEGRATED HARNESS FITTING WAS CONDUCTED BY:
☐ WEARER ☐ FLIGHT SURGEON ☐ PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER

24. IF SHOULDER HARNESS WAS USED, WAS IT:
☐ LOCKED ☐ UNLOCKED ☐ TIGHT ☐ SLACK ☐ OTHER CONDITION

HELMET

25. TYPE HELMET: AN-H-1

26. LIST PRESCRIBED MODIFICATIONS: Microphone ( )

27. OTHER MODIFICATIONS AND REASON FOR THEM

28. DID HELMET FIT PROPERLY? IF NO, GIVE REASON
☒ YES ☐ NO

29. HELMET FITTING WAS CONDUCTED BY: Unknown
☐ WEARER ☐ FLIGHT SURGEON ☐ PARACHUTE RIGGER ☐ AVIATION EQUIPMENT OFFICER ☐ OTHER

PARACHUTE

30. TYPE CHUTE

31. LAST PACKING DATE

32. MODEL/TYPE BAILOUT OXYGEN

33. AUTOMATIC RIPCORD, IF INSTALLED (Model and type)
☐ NONE

34. DID AUTOMATIC RIPCORD FAIL? IF YES, WHY?
☐ NO

35. WAS RIPCORD ACTIVATION
☐ MANUAL ☐ AUTOMATIC?

36. IF MANUALLY ACTIVATED STATE REASON AND ANY DIFFICULTIES ENCOUNTERED

37. DID CHUTE OPEN IMMEDIATELY? IF NO, GIVE REASON
☐ YES ☐ NO

38. ALTITUDE THAT CHUTE OPENED
FEET

39. OPENING SHOCK WAS:
☐ SLIGHT ☐ MODERATE ☐ SEVERE

40. BODY ATTITUDE AT OPENING

41. CONDITION OF CHUTE AFTER OPENING

42. CHUTE OSCILLATION PRESENT:
☐ NONE ☐ SLIGHT ☐ MODERATE ☐ SEVERE

43. IF OSCILLATION WAS PRESENT, HOW WAS IT STOPPED?

44. WEATHER CONDITIONS DURING DESCENT (List in sequence)

45. TOPOGRAPHY OF LANDING SITE

46. WAS BAILOUT OXYGEN CONNECTED?
☐ BEFORE EXIT ☐ AFTER EXIT ☐ NO ☐ N.A.

47. WAS BAILOUT OXYGEN USED? IF NOT, WHY
☐ YES ☐ NO

48. WHEN WAS IT ACTIVATED?
☐ BEFORE EXIT ☐ AFTER EXIT

49. GIVE DIFFICULTIES ENCOUNTERED WITH BAILOUT OXYGEN AND THEIR CAUSE, IF ANY

50. WAS CHUTE HARNESS
☐ TIGHT ☐ SNUG ☐ LOOSE

51. WAS A SITTING POSITION IN SLING OBTAINED DURING DESCENT? IF NOT, WHY?
☐ NO ☐ YES ☐ NOT ATTEMPTED

52. SEAT CUSHION IF PROVIDED (Model/type)
☐ NONE

53. WAS PARACHUTE LANYARD CONNECTED TO LIFE VEST D RING? IF NOT, WHY?
☐ NO ☐ YES

54. LIST TYPE OF PARACHUTE TRAINING COMPLETED BY THIS INDIVIDUAL
☐ NONE

55. IF ATTEMPT WAS MADE TO RELEASE PARACHUTE DURING DESCENT, WAS RELEASE ACTIVATED SUCCESSFULLY?
☐ YES ☐ NO

56. IF NO, GIVE REASON

57. IF A SUIT, EXPOSURE SUIT, FULL OR PARTIAL PRESSURE SUIT WAS WORN, DID IT FIT PROPERLY? IF NOT, LIST DISCREPANCIES IN FIT AND GIVE REASONS THEREFOR
☐ YES ☐ NO

58. WAS G SUIT EQUIPPED WITH A SPRING LOADED DISCONNECT ADAPTER? IF NO, GIVE REASON
☐ YES ☐ NO

OTHER

59. LIST ALL ITEMS OF NON-STANDARD CLOTHING OR SURVIVAL EQUIPMENT UTILIZED

60. WAS ANY ITEM OF EQUIPMENT LOST? IF YES STATE ITEM, WHEN LOST, AND REASON FOR LOSS.
☐ NO ☐ YES
Unknown ( )

61. WAS ANY ITEM OF EQUIPMENT DISCARDED? IF YES, STATE ITEM, WHEN DISCARDED, AND REASON FOR DISCARD.
☐ NO ☐ YES
Unknown ( )

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SECTION H - EMERGENCY EXIT FROM A/C AND SURVIVAL FACTORS

NAME OF INDIVIDUAL (Last, first, middle): BLYTHE, George Allison

MODEL A/C: SH3-A

S	E	S-SUSPECTED, E-ESTABLISHED	REMARKS
		1. EJECTION - Attempted	
		2. - Accomplished	
		3. - Through canopy	
YES	NO	EJECTION DIFFICULTIES ENCOUNTERED	IF YES, EXPLAIN DIFFICULTIES
		4. - Prior to	
		5. - During	
		6. - Subsequent to	
		7. Give type and model of seat used	
		8. BAILOUT - Attempted	
		- Accomplished	

9. ALTITUDE AT TIME OF EXIT (feet): N/A — ABOVE SEA LEVEL ____ ABOVE TOPOGRAPHY ____

10. ATTITUDE OR MANEUVER OF A/C AT EXIT OR IMPACT: Right wing and nose, down ( )

11. AIRSPEED: 120 Knots E ( )

12. COLLISION OF A/C WITH: ☐ GROUND ☒ WATER

13. CONTROLLED: ☐ YES ☐ NO ☒ UNKNOWN

14. POWER: ☒ ON ☐ OFF

15. WHEELS: ☐ UP ☒ DOWN

16. FLAPS: N/A ☐ FULL ☐ UP ☐ PARTIAL

17. CANOPY POSITION AT EXIT OR IMPACT: ( ) ☒ OPEN ☐ CLOSED ☐ JETTISONED

18. SEA STATE: 1

19. AIR TEMP.: 77 °F

20. WATER TEMP.: 86 °F

21. A/C FLOATED: 0 SEC.

22. TIME IN WATER: Unknown ( )

23. TIME IN RAFT: 0 ( )

BAIL OUT OR COLLISION WITH WATER OR GROUND:

24. EXIT USED: Unknown ( )

25. IS THIS THE RECOMMENDED EXIT? IF NO STATE REASON FOR CHOICE. ☐ YES ☐ NO

26. DIFFICULTIES WITH THIS EXIT WERE: ☐ IN REACHING ☐ IN OPENING ☐ IN EXITING

27. STATE NATURE OF DIFFICULTY:

28. BODY POSITION DURING EXIT: Unknown ( )

29. LIST OTHER FACTORS NOT INDICATED ABOVE WHICH AFFECTED EXIT FROM A/C

This crewman's body was not recovered. ( )

SURVIVAL FACTORS: Check factors below which are appropriate for this accident. Prepare a detailed narrative account of the factors checked below and attach to this form. Identify each item discussed by item number (e.g., H30, H31, etc.)

COMMUNICATIONS:

	30. Communicated position prior to mishap
X	31. Witnesses at scene
	32. Electronic signal devices
	33. Visual signal devices
	34. Auditory signal devices
	35. OTHER:

TRAVEL:

	36. LAND
	37. WATER

SHELTER:

	38. Life raft
	39. Parachute
	40. A/C structure
	41. Natural shelter
	42. Man-made shelter
	43. OTHER:

WATER SOURCE:

	44. Desalter kit, seawater or solar still
	45. Rain, dew, snow, ice, etc.
	46. Processed beverages
	47. Canteen, thermos, water breaker, etc.
	48. Streams, ponds, wells, etc.
	49. OTHER:

MAINTAINING BODY TEMPERATURE:

	50. Items used as shelter
	51. Items used as clothing
	52. Fire
	53. OTHER:

ENVIRONMENTAL HAZARDS:

	54. Exposure to natural forces
	55. Exposure to dangerous animals and plants
	56. Unfriendly native population
	57. OTHER:

MORALE:

	58. Isolation
	59. Psychological shock
	60. Lack of motivation to survive
	61. Boredom
	62. Rationing, activities, and group coordination
	63. OTHER:

FOOD SOURCE:

	64. Prepared survival rations
	65. Animals/plants
	66. OTHER:

SURVIVAL TRAINING RECEIVED PRIOR TO MISHAP:

	67.

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ADDENDUM MOR 1-62 BLYTHE, George Allison

H-31. From the description of the accident by the survivor, we can not determine what happened to this man. He was not seen by the Co-Pilot during or immediately after the accident, nor was any sign of him found by subsequent search units.

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SECTION I - PATHOLOGICAL FACTORS (Use A to denote ANTE MORTEM; P for POST MORTEM, when known and applicable.)

1. NAME OF INDIVIDUAL (Last, first, middle)				MODEL A/C
BLYTHE, George Allison				SH3-A
2. AGE	3. HEIGHT	4. WEIGHT	5. LOCATION AND DIRECTION FACING AT TIME OF ACCIDENT	6. INJURY CODE
20	70 INCHES	116	Starboard crew seat, facing forward	Z

7. UNCONSCIOUSNESS: ☐ SHORT DURATION LITTLE SIGNIFICANCE ☐ OTHER (give time)

8. INTERNAL INJURIES (Non-fatal cases)

HEAD INJURIES

9. CEREBRAL CONCUSSION: ☐ MINOR ☐ SERIOUS ☐ CRITICAL ☐ FATAL

10. FACIAL INJURIES (N.e.c.)

11. INTRA-ORAL INJURIES

12. MINOR EYE INJURIES: ☐ RIGHT ☐ LEFT

13. MAJOR EYE INJURIES: ☐ RIGHT ☐ LEFT

14. TYPE OF FRACTURE	SKULL: CRAN.	FACIAL	VERTEBRAE (Specify No.): CERV.	DOR.	LUMBAR	SACRAL	COCCYX	SHOULDER GIRDLE	RIBS	PELVIS	UPPER ARM R	UPPER ARM L	LOWER ARM R	LOWER ARM L	HAND R	HAND L	UPPER LEG R	UPPER LEG L	LOWER LEG R	LOWER LEG L	FOOT R	FOOT L
SIMPLE																						
COMPOUND																						
COMMINUTED																						

DIS-LOCATION: JAW; SHOULDER; ELBOW; WRIST; HAND; HIP; KNEE; ANKLE; FOOT

15. AMPUTATIONS/AVULSIONS (State Parts)

16. LIST PRE-EXISTING PHYSICAL DEFECTS PRESENT AT TIME OF POST CRASH EXAMINATION

17. SOFT TISSUE INJURIES		LACERATIONS: MILD	MODERATE	SEVERE	CONTUSION/SPRAIN/STRAIN: MILD	MODERATE	SEVERE	ABRASIONS: MILD	MODERATE	SEVERE
HEAD (n.e.c.)	VENTRAL									
	DORSAL									
NECK										
THORAX	VENTRAL									
	DORSAL									
ABDOMEN	VENTRAL									
	DORSAL									
EXTREMITIES	UPPER									
	LOWER									

18. ☒ DROWNED

19. ☐ ASPHYXIATED

20. SHOCK: ☐ MILD ☐ MODERATE ☐ SEVERE

21. EXPOSURE: ☐ MILD ☐ MODERATE ☐ SEVERE

22. ☐ BURNS ☐ FROST BITE

DEGREE	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
AREA	HEAD (ventral	Dorsal)		TRUNK (ventral	Dorsal)		ARMS	LEGS	

23. EXTENT OF CARBONIZATION: ☐ NONE ☐ COMPLETE
ARE TISSUE SPECIMENS OBTAINABLE? ☐ YES ☐ NO

NOTE: Attach a detailed narrative account of injuries, cause, structures causing injury, magnitudes of force, and include whether ANTE- OR POST-MORTEM if determined. It is necessary to give as clear a picture of injury cause and sequence as possible.

24. ADMITTED TO SICK LIST? IF YES, GIVE DIAGNOSIS ☐ YES ☐ NO

25. DIAGNOSIS NO. (NAVMED P-5094)

26. ESTIMATED STAY ON SICK LIST — DAYS

27. GROUNDED? IF YES GIVE REASON ☐ YES ☐ NO

28. ESTIMATED DURATION — DAYS

29. PRIMARY CAUSE OF DEATH (Use Basic Diagnostic Nomenclature, NAVMED P-5094)
LOST AT SEA — NO. 8601

30. SECONDARY CAUSE OF DEATH — NO. ____

31. AUTOPSY PERFORMED? ☐ YES ☐ NO

32. PROTOCOL: ☐ ATTACHED ☐ WILL BE FORWARDED

33. AUTOPSY CONDUCTED BY: ☐ PATHOLOGIST ☐ FLIGHT SURGEON

IF FLIGHT SURGEON DOES AUTOPSY USE "AUTOPSY GUIDE FOR A/C ACCIDENT FATALITIES", AFIP, 1957.

34. SPECIMEN	TEST PERFORMED	RESULTS	SPECIMEN	TEST PERFORMED	RESULTS
BLOOD: 1			TISSUE: (CNS)		
2			- MUSCLE		
3			- VISCERA		
URINE			OTHER:		
G.I CONTENTS					

35. IF ULTRAVIOLET LIGHT OR OTHER SPECIALIZED INVESTIGATIVE PROCEDURES WERE USED AT THE MISHAP SITE OR AUTOPSY, LIST THEM IN THIS SPACE. FOR EACH ENTRY IN THIS SPACE A NARRATIVE ACCOUNT OF THEIR RESULTS AND INTERPRETATION WILL BE ATTACHED.

★ U. S. GOVERNMENT PRINTING OFFICE: 1959—498198

ADDENDUM MOR 1-62 BLYTHE, George Allison

NARRATIVE OF INJURIES SUSTAINED

1. We can not accurately determine the cause of this man's death, as his remains were not recovered. We are presuming that he drowned.

2. The diagrams accompanying the report of LCDR HUGHES will show what may have happened to this man also.

NOR 1-62

Narrative on the Crash

This aircraft apparently struck right wing and nose down, at a speed of 100 knots. There are two major factors which probably contributed to the injuries sustained.

(b) (5)

Secondly, the heavy sonar bell is situated behind the number two operator's seat, (b) (5)

(b) The right side of the back of the seat is bent inward. (b) (5)

(b) (5)

(b) (5) The major portion of the debris that was recovered is from the forward crew compartment, in the area of the port entry hatch. This includes the decking at the entry, the piece next to it with the sonar track, the first aid kits, the broom closet door, and two pieces of quilted covers from the overhead in the crew section.

(b) (5)

MCR 1-62

Analysis of the Accident

(b) (5) [redacted]

In reconstructing this case, we know from the survivor's narrative and from reports of eyewitnesses that the plane lifted off the deck and progressed in its flight under control. The plane flew into instrument weather, and the co-pilot states that when he looked at the pilot, he was on the instruments. Flying this aircraft under such conditions requires a scan pattern to cover the V.G.I., Rad-Alt, and airspeed indicator. This flight had no abnormal characteristics or sudden or erratic attitude changes involved, [redacted]

(b) (5) [redacted]

(b) (5) [redacted] The co-pilot turned to the Rad-Alt, saw it rapidly passing through 80 feet toward zero, and then they hit the water.

(b) (5) [redacted] the co-pilot described the speed with which the radio altimeter needle went

through 80 feet as "unbelievably fast". The witnesses description of the flight path shows no part of it as having any such rapid altitude loss. Also, the co-pilot was looking out of the cockpit, and felt the attitude change before he looked at the Rad-Alt, [redacted]

(b) (5)

[redacted] We know now that prior to the time this helicopter lifted off the deck, the order had been given to hold up the carquals until the ship was clear of the rain showers. In its path down the chain of command, it was delayed enough so that it did not reach the pilot until he was airborne. The plane was in fact turning back to the carrier, after receiving the order, when the crash occurred. [redacted]

(b) (5)

[redacted] As in most accidents, however, there are lots of "Ifs".

MOR 1-62

Analysis of the Accident

The majority of the investigation board feels that the primary cause of this accident was pilot error in that he did not maintain a complete instrument flight during IFR conditions. They feel that he was alternation between visual contact and instrument scan and did not appreciate the altitude loss. They feel the natural tendency for a pilot turning right is to look out to clear himself, and also, in this case, to visually check the location of the aircraft carrier. They feel that this contributed to some degree of disorientation.

(b) (5) [redacted] The altimeter source operates perpendicular to the cross axis of the plane, and so if the plane is banked, the slant angle would produce a falsely high altitude reading. [redacted]

(b) (5) [redacted]

Investigation of these two points brought up these facts:

a. The BuWeps Manual of Aerodynamics for Aviators gives a radius of turn for an aircraft doing 95 knots in a 15^{0} turn as 2900 feet. The diagram of the accident depicts the mishap as best as can be reconstructed. The rescuing destroyer gave the distance from the scene of pickup to the carrier as 2300 yards, or 6900 feet.

(b) (5) [redacted]

Analysis of the Accident

(b) (5) [redacted]

b. In order to measure the possible error introduced into the Rad-Alt by the slant angle, we can set up a right triangle. The hypotenuse is the altimeter reading, the actual altitude the side to be solved for, and the amount of bank the angle. We solve for the unknown by using the tangent of the angle times the known hypotenuse, which we put at 80 feet.

For 15°, the actual altitude is 77 feet.

For 30°, the actual altitude is 69 feet.

For 45°, the actual altitude is 49 feet.

(b) (5) [redacted]

(b) (5) [redacted]

Statement of LTJG (b) (6) USNR, (b) (6) concerning HELASRON NINE AAR 1-62 occurring 10 OCTOBER 1962.

At approximately 1900 I checked to see if I was to fly. The SDO informed me I was not scheduled. About 2215 I received a call from the SDO telling me to get into my flight gear and prepare to switch seats in an aircraft already carqualling. I went to the ready room and was informed I was the next to switch. I went directly to flight deck control. They refueled "52" and launched about 2330. After the co-pilot had qualified I switched seats with him. The aircraft was on deck about a minute and a half. We lifted off and proceeded upwind. The pilot informed me that from this point on we would probably be IFR upwind and not break out of it until downwind. About 10 seconds later we got into the scup.

We were totally IFR. The ship called, saying "return to BANKNOTE and land until we clear the weather", or something to that effect. The pilot called "61" and asked for his position. "61" replied that he was about a mile ahead of us. The pilot initiated a 15 degree right bank and informed "61" he was turning right. I assumed he turned right to provide separation between the two aircraft as they returned to the ship.

At this point we were still IFR. I suffered a slight touch of vertigo. I was contact and the pilot was instrumente. All I could see was our own running lights and rotating beacon in the scup around me. I felt we were straight and level and crosschecked the VOI which indicated we were in a 15 degree right bank. I also noted the RADALT to be at 200 ft. I think our airspeed was 90-95 kts. although I'm not sure I visually checked the airspeed indicator. I was no longer suffering from vertigo and went contact again trying to regain visual contact. About 10 seconds after this I felt a definite change in attitude. Things did not feel right in the seat of my pants. I checked the RADALT and saw it pass through 00ft. dropping rapidly toward zero. I saw it pass 00ft and we hit the water. It was unbelievably fast. I had looked at the pilot only once after his initial bank and he appeared to be completely on instruments. Whether he stayed on instruments or not I don't know. We hit the water in what I believe to be a right-wing down altitude. Immediately I smelled JP-5. I felt something hit me in the nose which I believe to have been my hard hat.

After initial impact we bounced back into the air and seemed to go through several gyrations before we hit the water once again. On the second impact I don't know in what position the aircraft contacted the water. I was thrown violently about the cockpit. I had the impression my seat had torn loose and I was completely disoriented as to my position in the aircraft. At this point I felt water at my feet. It rose very fast but I was able to take a deep breath before I was completely submerged. I waited approximately two seconds, undid my lap belt and reached toward the left to locate the escape hatch. After a struggle I managed to get through one opening to find I had to go through another. It seemed as though I passed through three chambers before I cleared the aircraft. All the way up I kept running into great piles of debris which I managed to claw my way through. I finally reached the surface and found myself in JP-5 plus a great amount of debris from the aircraft. I had no difficulty in locating and actuating the toggles to my Mae West. The CO2 didn't quite fill my vest so I inflated it orally. I yelled in an attempt to locate the pilot but received no response. At this point I took stock of what I had and found I had lost my hardhat, flight gloves, flashlight and my revolver. I felt for the front of the Mae West in an attempt to locate the night flares but found the pockets had torn loose at the top from the Mae West. Once I found the flares I had no difficulty in locating the night end. I fired my first flare as "61" approached me. He circled once and turned back toward the carrier. At this point I looked around and noted a sponson floating inverted 10 yards from me. I swam over to it and climbed into the wheel well. It was quite buoyant and served well as a makeshift raft. I started looking for my whistle, located it with no difficulty and began blowing. At this time I also turned on the light on my Mae West which worked intermittently. I had to shake it to keep it from going out.

I waited until I saw search lights from the two closing destroyers to fire my second flare. All I did then was sit tight and continue blowing my whistle. The search lights from the USS MANLEY picked me up shortly thereafter and the ship closed me. They stopped dead in the water aproximately 40 yards from me. I was off their starboard beam. I abandoned the sponson and started swimming toward the ship. They threw several lines in my direction, one of which finally came over my shoulder. I grabbed hold and was pulled to within ten yards of the ship. I was advised there was a whaleboat in the water on the port side and it would pick me up shortly. Pickup by the boat was accomplished quickly and without incident. I was lifted physically into the whaleboat and was placed in a stokes stretcher. The whaleboat was taken to the port side and lifted aboard the destroyer. I was taken to sickbay where two corpsman and a doctor from the BASILONE cleaned me up. The MANLEY turned immediately toward Guantanamo Bay where I was hospitalized.

The skipper of the MANLEY disclosed that the second red flare indicated my position and he homed in on my whistle. I estimate that 30 seconds elapsed between the time the pilot transmitted his intention to turn right to "61" and the time we struck the water. Fifteen minutes elapsed between the time I found myself in the water and the time I was picked up by the MANLEY. I know of no way in which the accident could have been avoided since at no time did I have control of the aircraft.

(b) (5) [redacted]

(b) (6) [redacted]
LTJG USN

The above statement was procured from LTJG (b) [redacted] in the Guantanamo Bay Naval Hospital by a member of the Accident Investigation Board and is certified to be a true statement.

(b) (6) [redacted]
LCDR USN Senior Board Member

SPECIAL HANDLING required in accordnace with Para 70, OPNAV INST 3750.6D

STATEMENT of LCDR (b) (6) USN, concerning HELAIRON NINE AAR 1-62 occurring 18 October 1962.

On the afternoon of the 18th of October 1962 LCDR HUGHES departed Ready Room #1 at about 1330 and stated that he was going to his room for a nap, since he was scheduled for the evening launch. I returned to our room at about 1600 that afternoon and found him asleep. I turned in for a nap at that time as I was scheduled for the same launch (2200). LDCR HUGHES awoke and left the room at about 1615. At 1800 he returned and woke me stating that our brief time had been moved up to 1900 and that we should eat in flight gear in order to make brief time.

We arrived in Ready Room #1 at about 1900 for our launch brief. We were informed that the launch would be delayed and to stand by. We were scheduled for night helo carrier quals. LCDR HUGHES departed the ready room at about 1930 and returned at about 2100. He sat down and was apparently asleep until awakened to launch. He was scheduled to fly with LTJG (b) (6) LTJG (b) and LDDR (b) in that order. When the ready room was informed that LCDR HUGHES was airborne, LTJG (b) and I went to flight deck control to stand by to switch pilots. LTJG (b) commented that he was rather tired and that he was scheduled for an early FDO watch the following morning. After LTJG (b) was in the aircraft I observed the following: Helicopter side number 61, launched from the fantail area and flew parallel to the ships heading on the port side. Soon thereafter Helicopter side number 52 launched from near amid ship and paralleled the ships heading on the port side. At this point I lost sight of Helo 61's lights since the ship was heading into a rain shower area. Helo 52 crossed the bow of the ESSEX in a shallow right turn. The HS-9 Command Duty Officer, LT (b) (6) was standing near me and commented that Helo 52 appeared to be descending. The lights on Helo 52 looked rather fuzzy as it was in a rain shower and did appear to be to be in a shallow right turn - descending. At this time I lost sight of Helo 52 and went to a position on the starboard side of the ship through Flight Deck Control. As I reached the rail a flash of lightning appeared from the direction I last saw Helo 52, temporarily blinding me. I never regained sight of Helo 52's lights. Shortly thereafter a red glow appeared in the water on a bearing of approximately 110 degrees relative to the ships heading. Two destroyers were heading for this area and the ESSEX was starting to back down. LTJG (b) was reported to be rescued from the sea and the search continued until approximately noon on the 19th of October.

(b) (6)
LCDR USN

LCDR (b) was designated a Naval Aviator in June 1951 and has compiled a total of 3198 flight hours of which 180 hours have been in helicopters.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D.

STATEMENT of LCDR (b) (6) USN, concerning HELASRON NINE AAR 1-62 occurring 18 October 1962

I had been LCDR HUGHES roommate since loading aboard the USS ESSEX on 8 October 1962 until his death. Prior to this time I knew very little about him. During the period 8 October to 18 October 1962 the following observations are noted. LCDR HUGHES apparently did not have any family or great financial problems. He did have BuPers transfer orders to be effected in November, 1962, thus was concerned about selling his property in the Quonset Point, R.I., area, however, not to the extent of worry. He had no alcoholic beverages in his room and to the best of my knowledge did not touch any since departing home port. I was not aware of any personal problems he may have had. He did not have any personal mail when I inventoried his personal effects. He commented once that he and his wife corresponded once during a two week period while on cruises - through mutual agreement.

On the afternoon of the 18 October 1962 LCDR HUGHES departed Ready Room #1 at about 1330 and stated that he was going to his room for a nap, since he was scheduled for the evening launch. I returned to our room at about 1600 that afternoon and found him asleep. I turned in for a nap at what time as I was scheduled for the same launch (2200). LCDR HUGHES awoke and left the room at about 1615. At 1800 he returned and woke me stating that our brief time had been moved up to 1900 and that we should eat in flight gear in order to make brief time. Before departing the room he asked me if I would turn in his "Poopy" suit and inner liner for him. This request was probably due to his having BuPers orders and would have departed ESSEX prior to her arrival at home port. He also commented that he had better start wearing his dog tags faithfully since "you never know when you will need them". We arrived in Ready Room #1 at about 1900 for our launch brief. We were informed that the launch would be delayed and to stand by. We were scheduled for night helo carrier quals. LCDR HUGHES departed the ready room at about 1930 and returned at about 2100. He sat down and was apparently asleep until awakened to launch. He was scheduled to fly with LTJG (b) (6) LTJG (b) and LCDR (b) in that order. When the ready room was informed that LCDR HUGHES was airborne, LTJG (b) and I went to flight deck control to stand by to switch pilots. LTJG (b) commented that he was rather tired and that he was scheduled for an early AM watch the following morning. After LTJG (b) was in the aircraft I observed the following: Helicopter side number 61, launched from the fantail area and flew parallel to the ships heading on the port side. Soon thereafter Helicopter side number 52 launched from near amid ship and paralleled the ships heading on the port side. At this point I lost sight of Helo 61's lights since the ship was heading into a rain shower area. Helo 52 crossed the bow of the ESSEX in a shallow right turn. The HS-9 Command Duty Officer, LT (b) (6) was standing near me and commented that Helo 52 appeared to be descending. The lights on Helo 52 looked rather fuzzy as it was in a rain shower and did appear to me to be in a shallow right turn - descending. At this time I lost sight of Helo 52 and went to a position on the starboard side of the ship through Flight Deck Control. As I reached the rail a flash of lightning from the direction I last saw Helo 52, temporarily blinded me. I never regained sight of Helo 52's lights. Shortly thereafter a red glow appeared in the water on a bearing of approximately 110 degrees relative to the ships heading. Two destroyers were heading for this area and the ESSEX was starting to back down. LTJG (b) was rescued from the sea and the search continued until approximately noon on the 19th of October.

Our room (305) on ESSEX has been very hot since arriving in the Carribean area, averaging at least 92 degrees F. LCDR HUGHES complained many times about not being able to sleep due to the heat. There is one fan in the room which is on constantly and a vent from the ships' air system that worked intermittently. LCDR HUGHES got up several times each night to check on an XRAY fitting on the 2nd deck that apparently had to be open in order for the air to circulate to our room.

(b) (6)
LCDR USN

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

STATEMENT OF CDR (b) (6) USN, Air Officer USS ESSEX (CVS-9), concerning HELASRON NINE AAR 1-62 occurring 18 October 1962.

On Thursday night 18 October 1962, I was in Primary Flight Control conducting helicopter carrier qualification landings. Two (2) planes were in the carrier qualification pattern, side numbers "52" and "61". The helicopters launched at 2328, wind 15 knots down the angle deck. "52" had made landings at 2349, 2351, and 2354. After the 2354 landing the aircraft was held on deck for a single pilot switch. "61" had made 3 landings, the last one was made at 2355. After the launch from the 2355 landing, I instructed "61" to proceed up wind and give a weather report.

While "52" was still on deck, the Bridge called on the 1OJC sound power phone circuit and stated that 3 miles ahead there was a rain shower. There was a good horizon to the port, starboard and astern, but ahead there was no definite horizon. I recommended that "52" be held on deck and "61" be recovered and that both aircraft be held on deck until we were through the rain shower. Bridge concurred with this and as I started action to hold "52" the aircraft lifted; time 2356.

Just after "52" lifted and while along the port side of the ship, I informed both 52 and 61 of the weather ahead and also cleared both aircraft for landing and stated that we would hold both planes on deck until clear of the rain shower. Both aircraft acknowledged and "61" reported that there was reduced visibility ahead.

"52" proceeded ahead of the ship and I could see "61" approximately 2 miles ahead slightly to port. I instructed "61" to turn on his "Grimes Light" and he conformed. "61" reported that he was just ahead of a destroyer which was approximately 1½ miles about 15 degrees to port of the ESSEX. "61" asked "52" if he was ahead of the ESSEX with "Grimes Lights" on. "52" reported that this was his position. I had both aircraft in sight, "52" approximately 1 mile ahead of the ship 150 to 200 ft, and "61" approximately 1½ miles 15 degrees to port.

I understood "52" to state that he was turning down wind to starboard, "61" "rogered" and said "turning starboard". I watched "61" as he proceeded downwind along the port side. Within a few seconds after the radio communications between "61" and "52", a bolt of lightning illuminated the sky. Within seconds after the lightning a report came over the sound power phone that there was a possible HSS in the water off the starboard bow. I called "52" over the radio but no response I informed the Bridge of the report. I instructed "61" which at this time was at the 180 degree position to proceed to starboard and that "52" was in the water. As "61" proceeded around the stern I saw a flare off the starboard quarter. "61" proceeded to the scene and reported that he had the flare and a light in sight.

The Commanding Officer of HS-9 who was in Primary Flight Control requested that "61" be returned aboard. This request was passed to the bridge and approved. I instructed "61" to land aboard and he did so at 0001.

I did not see "52" start his turn to starboard nor did I see the aircraft lose altitude or hit the water. I saw no indications of survivors except for a flare. During the period of instructing "61", and relaying information to various other stations, I requested that the aviation boat crane be manned and a diver alerted. I observed the destroyer that was off the port bow proceeding around the stern of the ESSEX and proceeding to the scene of the crash. I could not determine the success of his rescue. "61" was kept in an alert status on the flight deck.

(b) (6)
CDR USN

CDR (b) has occupied the post of Air Officer aboard the USS ESSEX since 3 August 1961. He was designated a Naval Aviator February of 1944 and has accumulated a total of 3500 flight hours.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (9)

Recommendations

1. It is recommended that every effort be made to give pilots adequate forewarning of upcoming flights, so that they may get food and sleep as needed.

2. It is recommended that all pilots have reemphasized to them the importance of a good instrument scan during IFR flying. This includes cross-checking the barometric altimeter with the radio altimeter.

3. It is recommended that co-pilots be reminded of their responsibility to cross-check the instruments during IFR flying, in addition to maintaining an outside visual check.

4. It is recommended that all Naval Aviators be reminded, at the squadron or air group level, that their prime function requires them to be at their best. They must realize that the responsibility for this is their own and they should see to it that they get the needed sleep. They are subject to call at any time, and if operating under a varying schedule, as was the case here, should take every opportunity to get rest.

5. It is recommended that pilots be reminded, by their Survival Officer, to remain in any floating device, regardless of how imminent rescue seems or how warm the water. The co-pilot left his makeshift raft to swim to the destroyer as it approached. He was in shark-type water, and his staying in the sponson would not have hindered his rescue at all. He may have jeopardized himself had circumstances occurred which delayed his rescue.

6. It is recommended that the Commanding Officer and crew of the USS MANLEY

Recommendations (Cont'd)

be commended by the Aviation Safety Center for the excellent manner in which They conducted this rescue. They were on the scene quickly, homed in on the survivor's flare and whistle, located him with searchlights, and got a life line to him. They then launched a boat, and had four men pick him bodily from the water and place him in a Stokes stretcher. The boat was then hauled onto the ship and treatment rendered for his wounds. This was all done within 15 minutes of impact.

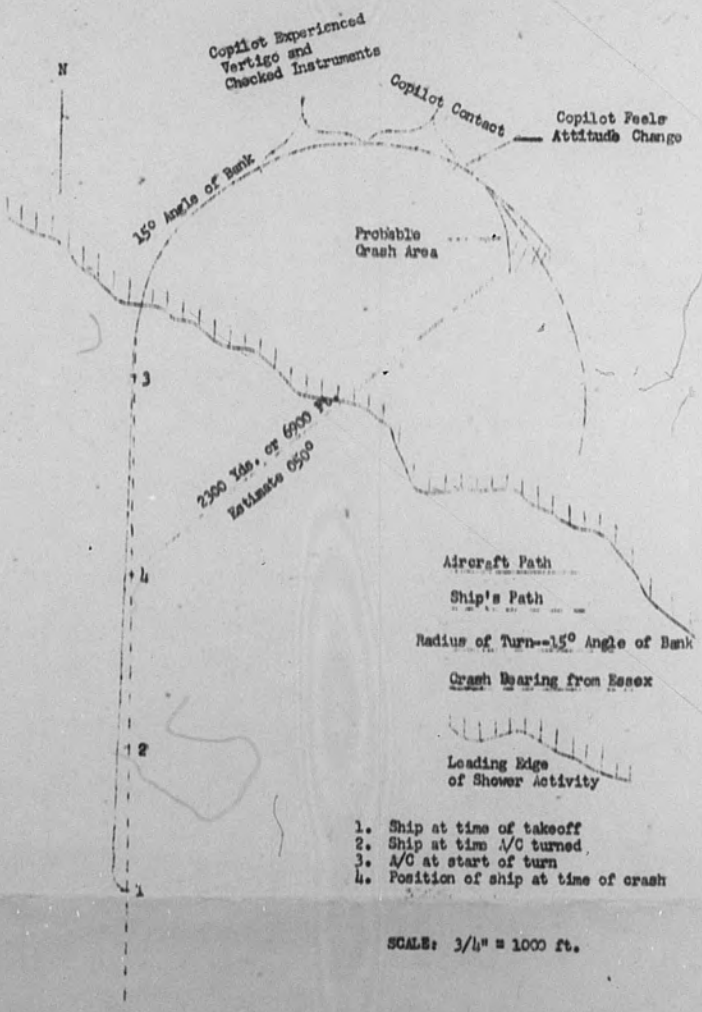
This reflects good training and coordination, and such action should be rewarded.

7. It is recommended that a review be made of the coordination between all parties involved, to be sure that carrier qualifications be planned and carried out in the best possible weather. If rain or other IFR conditions seem imminent, the operations should be delayed or terminated, until good weather is again available. This includes both day and night.

8. It is recommended that seats, and possibly even seat cushions, be marked with plane number and seat location to aid in analyzing an accident in which these are recovered.

9. It is recommended that all SH-3A pilots be instructed to turn off the forward rotating beacon when flying under IFR conditions. While this may not be a cause of flicker vertigo, it is known to be distraction.

Diagram of Flight Path



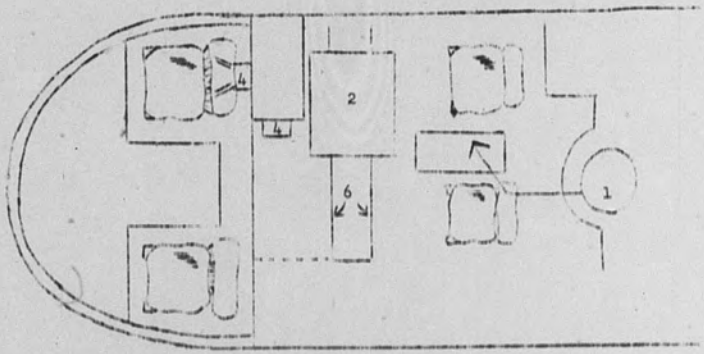
1. Ship at time of takeoff
2. Ship at time A/C turned
3. A/C at start of turn
4. Position of ship at time of crash

SCALE: 3/4" = 1000 ft.

SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH PARA 70, OPNAV INST 3750.6D

ENCLOSURE (28)

DIAGRAM OF SH3-A HELICOPTER



1 SONAR DOME

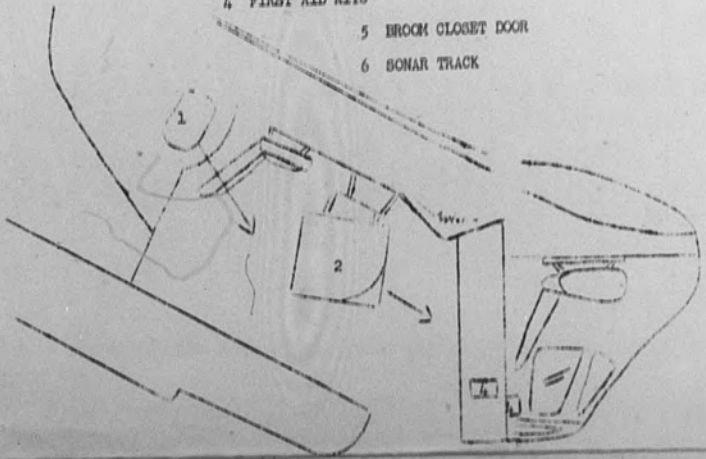
2 SONAR EQUIPMENT

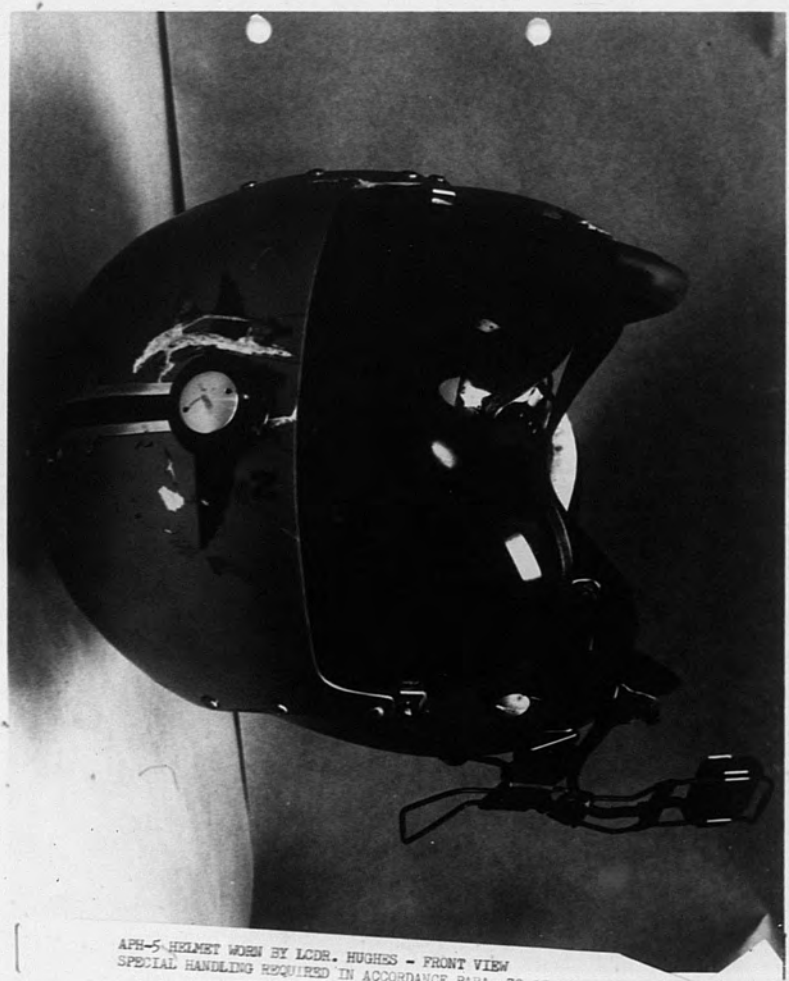
3 DECKING RECOVERED WITH FORWARD SONAR TRACK

4 FIRST AID KITS

5 BROOM CLOSET DOOR

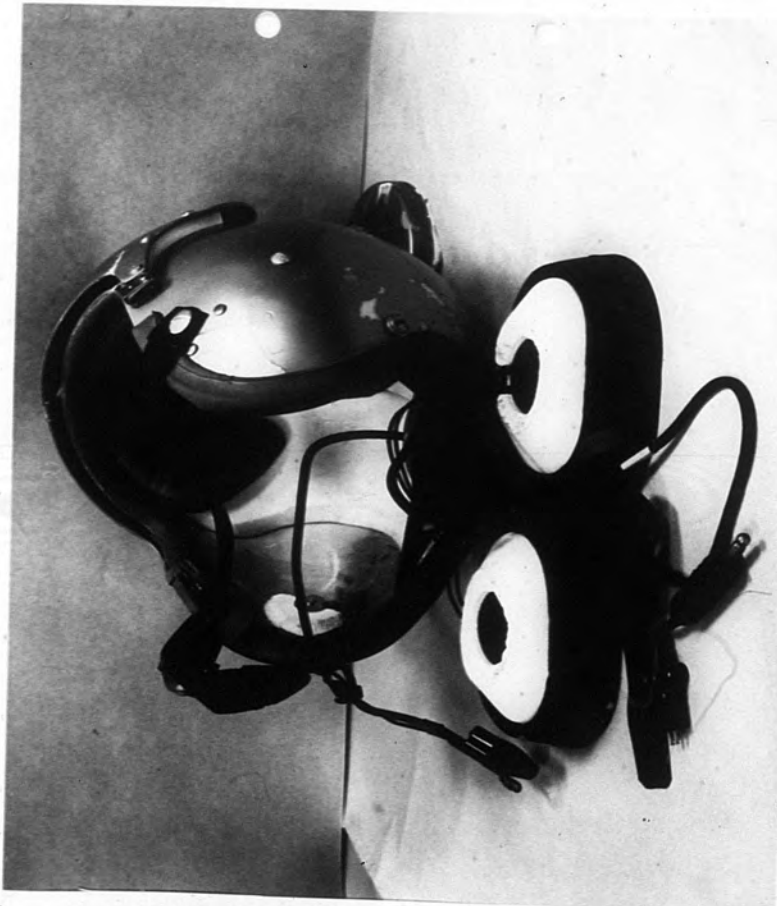
6 SONAR TRACK





APH-5 HELMET WORN BY LCDR. HUGHES - FRONT VIEW
SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA. 70 OPNAV INSTR. 3750.6D

APH-5 HELMET WORN BY LCDR. HUGHES - FRONT VIEW
SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA. 70 OPNAV INSTR. 3750.6D



APH-5 HELMET WORN BY LCDR. HUGHES - BOTTOM VIEW

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA. 70 OPNAV INSTR. 3750.6D

FLIGHT SUIT, FRONT VIEW, WORN BY LTJG. (b)

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA 70 OPNAV INSTR. 3750.6D

FLIGHT SUIT, BACK VIEW, WORN BY LTJG. (b)

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA 70 OPNAV INSTR. 3750.6D

APH-5 HELMET WORN BY USER. (b)

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA 70 OPNAV INSTR. 3750.6D

MAE WEST, FRONT VIEW, WORN BY LTJG. (b)

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA 70 OPNAV INSTR. 3750.6D

OTHER RECOVERED SURVIVAL GEAR OF LTJG. (b)

SPECIAL HANDLING REQUIRED IN ACCORDANCE PARA 7O OPNAV INSTR. 3750.6D